

## **FUNCIÓN OBJETIVO**

COSTO DE Y1				COSTO DE Y2				COSTO DE V3				COSTO DE V4			
1	C\$1			2	C\$2			3	C\$3			4	C\$4		
Loté				Loté				Loté				Loté			
Día				Día				Día				Día			
1	CSY111+ + CSY112+ + CSY113+ + CSY114+			1	CSY211+ + CSY212+ + CSY213+ + CSY241+			1	CSY311+ + CSY321+ + CSY331+ + CSY341+			1	CSY411+ + CSY421+ + CSY431+ + CSY441+		
2	CSY112+ + CSY112+ + CSY113+ + CSY114+			2	CSY212+ + CSY222+ + CSY232+ + CSY242+			2	CSY312+ + CSY322+ + CSY332+ + CSY342+			2	CSY412+ + CSY422+ + CSY432+ + CSY442+		
3	CSY113+ + CSY113+ + CSY113+ + CSY114+			3	CSY213+ + CSY223+ + CSY233+ + CSY243+			3	CSY313+ + CSY323+ + CSY333+ + CSY343+			3	CSY413+ + CSY423+ + CSY433+ + CSY443+		
4	CSY114+ + CSY114+ + CSY114+ + CSY114+			4	CSY214+ + CSY224+ + CSY234+ + CSY244+			4	CSY314+ + CSY324+ + CSY334+ + CSY344+			4	CSY414+ + CSY424+ + CSY434+ + CSY444+		
5	CSY115+ + CSY115+ + CSY115+ + CSY115+			5	CSY215+ + CSY225+ + CSY235+ + CSY245+			5	CSY315+ + CSY325+ + CSY335+ + CSY345+			5	CSY415+ + CSY425+ + CSY435+ + CSY445+		
6	CSY116+ + CSY116+ + CSY116+ + CSY116+			6	CSY216+ + CSY226+ + CSY236+ + CSY246+			6	CSY316+ + CSY326+ + CSY336+ + CSY346+			6	CSY416+ + CSY426+ + CSY436+ + CSY446+		
7	CSY117+ + CSY117+ + CSY117+ + CSY117+			7	CSY217+ + CSY227+ + CSY237+ + CSY247+			7	CSY317+ + CSY327+ + CSY337+ + CSY347+			7	CSY417+ + CSY427+ + CSY437+ + CSY447+		
8	CSY118+ + CSY118+ + CSY118+ + CSY118+			8	CSY218+ + CSY228+ + CSY238+ + CSY248+			8	CSY318+ + CSY328+ + CSY338+ + CSY348+			8	CSY418+ + CSY428+ + CSY438+ + CSY448+		
9	CSY119+ + CSY119+ + CSY119+ + CSY119+			9	CSY219+ + CSY229+ + CSY239+ + CSY249+			9	CSY319+ + CSY329+ + CSY339+ + CSY349+			9	CSY419+ + CSY429+ + CSY439+ + CSY449+		
10	CSY110+ + CSY110+ + CSY110+ + CSY110+			10	CSY210+ + CSY210+ + CSY210+ + CSY210+			10	CSY310+ + CSY320+ + CSY330+ + CSY340+			10	CSY410+ + CSY420+ + CSY430+ + CSY440+		
11	CSY111+ + CSY111+ + CSY111+ + CSY111+			11	CSY211+ + CSY221+ + CSY231+ + CSY2411+			11	CSY311+ + CSY321+ + CSY331+ + CSY341+			11	CSY411+ + CSY421+ + CSY431+ + CSY441+		
12	CSY112+ + CSY112+ + CSY112+ + CSY112+			12	CSY212+ + CSY222+ + CSY232+ + CSY242+			12	CSY312+ + CSY322+ + CSY332+ + CSY342+			12	CSY412+ + CSY422+ + CSY432+ + CSY442+		
13	CSY113+ + CSY113+ + CSY113+ + CSY113+			13	CSY213+ + CSY223+ + CSY233+ + CSY243+			13	CSY313+ + CSY323+ + CSY333+ + CSY343+			13	CSY413+ + CSY423+ + CSY433+ + CSY443+		
14	CSY114+ + CSY114+ + CSY114+ + CSY114+			14	CSY214+ + CSY224+ + CSY234+ + CSY244+			14	CSY314+ + CSY324+ + CSY334+ + CSY344+			14	CSY414+ + CSY424+ + CSY434+ + CSY444+		
15	CSY115+ + CSY115+ + CSY115+ + CSY115+			15	CSY215+ + CSY225+ + CSY235+ + CSY245+			15	CSY315+ + CSY325+ + CSY335+ + CSY345+			15	CSY415+ + CSY425+ + CSY435+ + CSY445+		
16	CSY116+ + CSY116+ + CSY116+ + CSY116+			16	CSY216+ + CSY226+ + CSY236+ + CSY246+			16	CSY316+ + CSY326+ + CSY336+ + CSY346+			16	CSY416+ + CSY426+ + CSY436+ + CSY446+		
17	CSY117+ + CSY117+ + CSY117+ + CSY117+			17	CSY217+ + CSY227+ + CSY237+ + CSY247+			17	CSY317+ + CSY327+ + CSY337+ + CSY347+			17	CSY417+ + CSY427+ + CSY437+ + CSY447+		
18	CSY118+ + CSY118+ + CSY118+ + CSY118+			18	CSY218+ + CSY228+ + CSY238+ + CSY248+			18	CSY318+ + CSY328+ + CSY338+ + CSY348+			18	CSY418+ + CSY428+ + CSY438+ + CSY448+		
19	CSY119+ + CSY119+ + CSY119+ + CSY119+			19	CSY219+ + CSY229+ + CSY239+ + CSY249+			19	CSY319+ + CSY329+ + CSY339+ + CSY349+			19	CSY419+ + CSY429+ + CSY439+ + CSY449+		
20	CSY120+ + CSY120+ + CSY120+ + CSY120+			20	CSY220+ + CSY220+ + CSY220+ + CSY220+			20	CSY320+ + CSY320+ + CSY320+ + CSY320+			20	CSY420+ + CSY420+ + CSY420+ + CSY420+		
21	CSY121+ + CSY121+ + CSY121+ + CSY121+			21	CSY221+ + CSY222+ + CSY2321+ + CSY2421+			21	CSY321+ + CSY322+ + CSY3321+ + CSY3421+			21	CSY421+ + CSY422+ + CSY4321+ + CSY4421+		
22	CSY122+ + CSY122+ + CSY122+ + CSY122+			22	CSY222+ + CSY222+ + CSY2322+ + CSY2422+			22	CSY322+ + CSY322+ + CSY3322+ + CSY3422+			22	CSY422+ + CSY422+ + CSY4322+ + CSY4422+		
23	CSY123+ + CSY123+ + CSY123+ + CSY123+			23	CSY223+ + CSY223+ + CSY2323+ + CSY2423+			23	CSY323+ + CSY323+ + CSY3323+ + CSY3423+			23	CSY423+ + CSY423+ + CSY4323+ + CSY4423+		
24	CSY124+ + CSY124+ + CSY124+ + CSY124+			24	CSY224+ + CSY224+ + CSY2324+ + CSY2424+			24	CSY324+ + CSY324+ + CSY3324+ + CSY3424+			24	CSY424+ + CSY424+ + CSY4324+ + CSY4424+		
25	CSY125+ + CSY125+ + CSY125+ + CSY125+			25	CSY225+ + CSY225+ + CSY2325+ + CSY2425+			25	CSY325+ + CSY325+ + CSY3325+ + CSY3425+			25	CSY425+ + CSY425+ + CSY4325+ + CSY4425+		
26	CSY126+ + CSY126+ + CSY126+ + CSY126+			26	CSY226+ + CSY226+ + CSY2326+ + CSY2426+			26	CSY326+ + CSY326+ + CSY3326+ + CSY3426+			26	CSY426+ + CSY426+ + CSY4326+ + CSY4426+		
27	CSY127+ + CSY127+ + CSY127+ + CSY127+			27	CSY227+ + CSY227+ + CSY2327+ + CSY2427+			27	CSY327+ + CSY327+ + CSY3327+ + CSY3427+			27	CSY427+ + CSY427+ + CSY4327+ + CSY4427+		
28	CSY128+ + CSY128+ + CSY128+ + CSY128+			28	CSY228+ + CSY228+ + CSY2328+ + CSY2428+			28	CSY328+ + CSY328+ + CSY3328+ + CSY3428+			28	CSY428+ + CSY428+ + CSY4328+ + CSY4428+		
29	CSY129+ + CSY129+ + CSY129+ + CSY129+			29	CSY229+ + CSY229+ + CSY2329+ + CSY2429+			29	CSY329+ + CSY329+ + CSY3329+ + CSY3429+			29	CSY429+ + CSY429+ + CSY4329+ + CSY4429+		
30	CSY130+ + CSY130+ + CSY130+ + CSY130+			30	CSY230+ + CSY230+ + CSY230+ + CSY230+			30	CSY330+ + CSY330+ + CSY330+ + CSY3430+			30	CSY430+ + CSY430+ + CSY430+ + CSY4430+		

COSTO DE ZI		CPI	Lote		
		1	2	3	4
Dia					
1	CHIZ111 +	CHIZ121 +	CHIZ131 +	CHIZ141 +	
2	CHIZ112 +	CHIZ122 +	CHIZ132 +	CHIZ142 +	
3	CHIZ113 +	CHIZ123 +	CHIZ133 +	CHIZ143 +	
4	CHIZ114 +	CHIZ124 +	CHIZ134 +	CHIZ144 +	
5	CHIZ115 +	CHIZ125 +	CHIZ135 +	CHIZ145 +	
6	CHIZ116 +	CHIZ126 +	CHIZ136 +	CHIZ146 +	
7	CHIZ117 +	CHIZ127 +	CHIZ137 +	CHIZ147 +	
8	CHIZ118 +	CHIZ128 +	CHIZ138 +	CHIZ148 +	
9	CHIZ119 +	CHIZ129 +	CHIZ139 +	CHIZ149 +	
10	CHIZ110 +	CHIZ120 +	CHIZ130 +	CHIZ140 +	
11	CHIZ111 +	CHIZ121 +	CHIZ131 +	CHIZ141 +	
12	CHIZ112 +	CHIZ122 +	CHIZ132 +	CHIZ142 +	
13	CHIZ113 +	CHIZ123 +	CHIZ133 +	CHIZ143 +	
14	CHIZ114 +	CHIZ124 +	CHIZ134 +	CHIZ144 +	
15	CHIZ115 +	CHIZ125 +	CHIZ135 +	CHIZ145 +	
16	CHIZ116 +	CHIZ126 +	CHIZ136 +	CHIZ146 +	
17	CHIZ117 +	CHIZ127 +	CHIZ137 +	CHIZ147 +	
18	CHIZ118 +	CHIZ128 +	CHIZ138 +	CHIZ148 +	
19	CHIZ119 +	CHIZ129 +	CHIZ139 +	CHIZ149 +	
20	CHIZ120 +	CHIZ120 +	CHIZ130 +	CHIZ140 +	
21	CHIZ121 +	CHIZ121 +	CHIZ131 +	CHIZ141 +	
22	CHIZ122 +	CHIZ122 +	CHIZ132 +	CHIZ142 +	
23	CHIZ123 +	CHIZ123 +	CHIZ133 +	CHIZ143 +	
24	CHIZ124 +	CHIZ124 +	CHIZ134 +	CHIZ144 +	
25	CHIZ125 +	CHIZ125 +	CHIZ135 +	CHIZ145 +	
26	CHIZ126 +	CHIZ126 +	CHIZ136 +	CHIZ146 +	
27	CHIZ127 +	CHIZ127 +	CHIZ137 +	CHIZ147 +	
28	CHIZ128 +	CHIZ128 +	CHIZ138 +	CHIZ148 +	
29	CHIZ129 +	CHIZ129 +	CHIZ139 +	CHIZ149 +	
30	CHIZ130 +	CHIZ130 +	CHIZ130 +	CHIZ140 +	

## RESTRICCIONES DE CAPACIDAD

Lote	Día	X				Y				Z					
		1	2	3	4	1	2	3	4	1	2	3	4		
1	1	X111+	X211+	X311+	X411+	Y111+	Y211+	Y311+	Y411+	Z111-	N11	=	0	N11	< Max11
2	1	X121+	X221+	X321+	X421+	Y121+	Y221+	Y321+	Y421+	Z121-	N21	=	0	N21	< Max21
3	1	X131+	X231+	X331+	X431+	Y131+	Y231+	Y331+	Y431+	Z131-	N31	=	0	N31	< Max31
4	1	X141+	X241+	X341+	X441+	Y141+	Y241+	Y341+	Y441+	Z141-	N41	=	0	N41	< Max41
1	2	X112+	X212+	X312+	X412+	Y112+	Y212+	Y312+	Y412+	Z112-	N12	=	0	N12	< Max12
2	2	X122+	X222+	X322+	X422+	Y122+	Y222+	Y322+	Y422+	Z122-	N22	=	0	N22	< Max22
3	2	X132+	X232+	X332+	X432+	Y132+	Y232+	Y332+	Y432+	Z132-	N32	=	0	N32	< Max32
4	2	X142+	X242+	X342+	X442+	Y142+	Y242+	Y342+	Y442+	Z142-	N42	=	0	N42	< Max42
1	3	X113+	X213+	X313+	X413+	Y113+	Y213+	Y313+	Y413+	Z113-	N13	=	0	N13	< Max13
2	3	X123+	X223+	X323+	X423+	Y123+	Y223+	Y323+	Y423+	Z123-	N23	=	0	N23	< Max23
3	3	X133+	X233+	X333+	X433+	Y133+	Y233+	Y333+	Y433+	Z133-	N33	=	0	N33	< Max33
4	3	X143+	X243+	X343+	X443+	Y143+	Y243+	Y343+	Y443+	Z143-	N43	=	0	N43	< Max43
1	4	X114+	X214+	X314+	X414+	Y114+	Y214+	Y314+	Y414+	Z114-	N14	=	0	N14	< Max14
2	4	X124+	X224+	X324+	X424+	Y124+	Y224+	Y324+	Y424+	Z124-	N24	=	0	N24	< Max24
3	4	X134+	X234+	X334+	X434+	Y134+	Y234+	Y334+	Y434+	Z134-	N34	=	0	N34	< Max34
4	4	X144+	X244+	X344+	X444+	Y144+	Y244+	Y344+	Y444+	Z144-	N44	=	0	N44	< Max44
1	5	X115+	X215+	X315+	X415+	Y115+	Y215+	Y315+	Y415+	Z115-	N15	=	0	N15	< Max15
2	5	X125+	X225+	X325+	X425+	Y125+	Y225+	Y325+	Y425+	Z125-	N25	=	0	N25	< Max25
3	5	X135+	X235+	X335+	X435+	Y135+	Y235+	Y335+	Y435+	Z135-	N35	=	0	N35	< Max35
4	5	X145+	X245+	X345+	X445+	Y145+	Y245+	Y345+	Y445+	Z145-	N45	=	0	N45	< Max45
1	6	X116+	X216+	X316+	X416+	Y116+	Y216+	Y316+	Y416+	Z116-	N16	=	0	N16	< Max16
2	6	X126+	X226+	X326+	X426+	Y126+	Y226+	Y326+	Y426+	Z126-	N26	=	0	N26	< Max26
3	6	X136+	X236+	X336+	X436+	Y136+	Y236+	Y336+	Y436+	Z136-	N36	=	0	N36	< Max36
4	6	X146+	X246+	X346+	X446+	Y146+	Y246+	Y346+	Y446+	Z146-	N46	=	0	N46	< Max46
1	7	X117+	X217+	X317+	X417+	Y117+	Y217+	Y317+	Y417+	Z117-	N17	=	0	N17	< Max17
2	7	X127+	X227+	X327+	X427+	Y127+	Y227+	Y327+	Y427+	Z127-	N27	=	0	N27	< Max27
3	7	X137+	X237+	X337+	X437+	Y137+	Y237+	Y337+	Y437+	Z137-	N37	=	0	N37	< Max37
4	7	X147+	X247+	X347+	X447+	Y147+	Y247+	Y347+	Y447+	Z147-	N47	=	0	N47	< Max47
1	8	X118+	X218+	X318+	X418+	Y118+	Y218+	Y318+	Y418+	Z118-	N18	=	0	N18	< Max18
2	8	X128+	X228+	X328+	X428+	Y128+	Y228+	Y328+	Y428+	Z128-	N28	=	0	N28	< Max28
3	8	X138+	X238+	X338+	X438+	Y138+	Y238+	Y338+	Y438+	Z138-	N38	=	0	N38	< Max38
4	8	X148+	X248+	X348+	X448+	Y148+	Y248+	Y348+	Y448+	Z148-	N48	=	0	N48	< Max48
1	9	X119+	X219+	X319+	X419+	Y119+	Y219+	Y319+	Y419+	Z119-	N19	=	0	N19	< Max19
2	9	X129+	X229+	X329+	X429+	Y129+	Y229+	Y329+	Y429+	Z129-	N29	=	0	N29	< Max29
3	9	X139+	X239+	X339+	X439+	Y139+	Y239+	Y339+	Y439+	Z139-	N39	=	0	N39	< Max39
4	9	X149+	X249+	X349+	X449+	Y149+	Y249+	Y349+	Y449+	Z149-	N49	=	0	N49	< Max49
1	10	X110+	X210+	X310+	X410+	Y110+	Y210+	Y310+	Y410+	Z110-	N10	=	0	N10	< Max10
2	10	X120+	X220+	X320+	X420+	Y120+	Y220+	Y320+	Y420+	Z120-	N20	=	0	N20	< Max20
3	10	X130+	X230+	X330+	X430+	Y130+	Y230+	Y330+	Y430+	Z130-	N30	=	0	N30	< Max30
4	10	X140+	X240+	X340+	X440+	Y140+	Y240+	Y340+	Y440+	Z140-	N40	=	0	N40	< Max40
1	11	X111+	X211+	X311+	X411+	Y111+	Y211+	Y311+	Y411+	Z111-	N11	=	0	N11	< Max11
2	11	X121+	X221+	X321+	X421+	Y121+	Y221+	Y321+	Y421+	Z121-	N21	=	0	N21	< Max21
3	11	X131+	X231+	X331+	X431+	Y131+	Y231+	Y331+	Y431+	Z131-	N31	=	0	N31	< Max31
4	11	X141+	X241+	X341+	X441+	Y141+	Y241+	Y341+	Y441+	Z141-	N41	=	0	N41	< Max41
1	12	X112+	X212+	X312+	X412+	Y112+	Y212+	Y312+	Y412+	Z112-	N12	=	0	N12	< Max12
2	12	X122+	X222+	X322+	X422+	Y122+	Y222+	Y322+	Y422+	Z122-	N22	=	0	N22	< Max22
3	12	X132+	X232+	X332+	X432+	Y132+	Y232+	Y332+	Y432+	Z132-	N32	=	0	N32	< Max32
4	12	X142+	X242+	X342+	X442+	Y142+	Y242+	Y342+	Y442+	Z142-	N42	=	0	N42	< Max42
1	13	X113+	X213+	X313+	X413+	Y113+	Y213+	Y313+	Y413+	Z113-	N13	=	0	N13	< Max13
2	13	X123+	X223+	X323+	X423+	Y123+	Y223+	Y323+	Y423+	Z123-	N23	=	0	N23	< Max23
3	13	X133+	X233+	X333+	X433+	Y133+	Y233+	Y333+	Y433+	Z133-	N33	=	0	N33	< Max33
4	13	X143+	X243+	X343+	X443+	Y143+	Y243+	Y343+	Y443+	Z143-	N43	=	0	N43	< Max43
1	14	X114+	X214+	X314+	X414+	Y114+	Y214+	Y314+	Y414+	Z114-	N14	=	0	N14	< Max14
2	14	X124+	X224+	X324+	X424+	Y124+	Y224+	Y324+	Y424+	Z124-	N24	=	0	N24	< Max24
3	14	X134+	X234+	X334+	X434+	Y134+	Y234+	Y334+	Y434+	Z134-	N34	=	0	N34	< Max34
4	14	X144+	X244+	X344+	X444+	Y144+	Y244+	Y344+	Y444+	Z144-	N44	=	0	N44	< Max44
1	15	X115+	X215+	X315+	X415+	Y115+	Y215+	Y315+	Y415+	Z115-	N15	=	0	N15	< Max15
2	15	X125+	X225+	X325+	X425+	Y125+	Y225+	Y325+	Y425+	Z125-	N25	=	0	N25	< Max25
3	15	X135+	X235+	X335+	X435+	Y135+	Y235+	Y335+	Y435+	Z135-	N35	=	0	N35	< Max35
4	15	X145+	X245+	X345+	X445+	Y145+	Y245+	Y345+	Y445+	Z145-	N45	=	0	N45	< Max45
1	16	X116+	X216+	X316+	X416+	Y116+	Y216+	Y316+	Y416+	Z116-	N16	=	0	N16	< Max16
2	16	X126+	X226+	X326+	X426+	Y126+	Y226+	Y326+	Y426+	Z126-	N26	=	0	N26	< Max26
3	16	X136+	X236+	X336+	X436+	Y136+	Y236+	Y336+	Y436+	Z136-	N36	=	0	N36	< Max36
4	16	X146+	X246+	X346+	X446+	Y146+	Y246+	Y346+	Y446+	Z146-	N46	=	0	N46	< Max46
1	17	X117+	X217+	X317+	X417+	Y117+	Y217+	Y317+	Y417+	Z117-	N17	=	0	N17	< Max17
2	17	X127+	X227+	X327+	X427+	Y127+	Y227+	Y327+	Y427+	Z127-	N27	=	0	N27	< Max27
3	17	X137+	X237+	X337+	X437+	Y137+	Y237+	Y337+	Y437+	Z137-	N37	=	0	N37	< Max37
4	17	X147+	X247+	X347+	X447+	Y147+	Y247+	Y347+	Y447+	Z147-	N47	=	0	N47	< Max47
1	18	X118+	X218+	X318+	X418+	Y118+	Y218+	Y318+	Y418+	Z118-	N18	=	0	N18	< Max18
2	18	X128+	X228+	X328+	X428+	Y128+	Y228+	Y328+	Y428+	Z128-	N28	=	0	N28	< Max28
3	18	X138+	X238+	X338+	X438+	Y138+	Y238+	Y338+	Y438+	Z138-	N38	=	0	N38	< Max38
4	18	X148+	X248+	X348+	X448+	Y148+	Y248+	Y348+	Y448+	Z148-	N48	=	0	N48	< Max48
1	19	X119+	X219+	X319+	X419+	Y119+	Y219+	Y319+	Y419+	Z119-	N19	=	0	N19	< Max19
2	19	X129+	X229+	X329+	X429+	Y129+	Y229+	Y329+	Y429+	Z129-	N29	=	0	N29	< Max29
3	19	X139+	X239+	X339+	X439+	Y139+	Y239+	Y339+	Y439+	Z139-	N39	=	0	N39	< Max39
4	19	X149+	X249+	X349+	X449+	Y149+	Y249+	Y349+	Y449+	Z149-	N49	=	0	N49	< Max49
1	20	X120+	X220+	X320+	X420+	Y120+	Y220+	Y320+	Y420+	Z120-	N20	=	0	N20	< Max20
2	20	X1220+	X2220+	X3220+	X4220+	Y1220+	Y2220+	Y3220+	Y4220+	Z1220-	N220	=	0	N220	< Max20
3	20	X1320+	X2320+	X3320+	X4320+	Y1320+	Y2320+	Y3320+	Y4320+	Z1320-	N320	=	0	N320	< Max320
4	20	X1420+	X2420+	X3420+	X4420+	Y1420+	Y2420+	Y3420+	Y4420+	Z1420-	N420	=	0	N420	< Max420
1	21	X121+	X221+	X321+	X421+	Y121+	Y221+	Y321+	Y421+	Z121-	N21	=	0	N21	< Max21
2	21	X122													

## RESTRICCIONES DE DISPONIBILIDAD PARA LOS INGREDIENTES DEL TIPO 1

Ingrediente	Día	Lote			
		1	2	3	4
1	1	X111 +	X121 +	X131 +	X141 < DX11
2	1	X211 +	X221 +	X231 +	X241 < DX21
3	1	X311 +	X321 +	X331 +	X341 < DX31
4	1	X411 +	X421 +	X431 +	X441 < DX41
1	2	X112 +	X122 +	X132 +	X142 < DX12
2	2	X212 +	X222 +	X232 +	X242 < DX22
3	2	X312 +	X322 +	X332 +	X342 < DX32
4	2	X412 +	X422 +	X432 +	X442 < DX42
1	3	X113 +	X123 +	X133 +	X143 < DX13
2	3	X213 +	X223 +	X233 +	X243 < DX23
3	3	X313 +	X323 +	X333 +	X343 < DX33
4	3	X413 +	X423 +	X433 +	X443 < DX43
1	4	X114 +	X124 +	X134 +	X144 < DX14
2	4	X214 +	X224 +	X234 +	X244 < DX24
3	4	X314 +	X324 +	X334 +	X344 < DX34
4	4	X414 +	X424 +	X434 +	X444 < DX44
1	5	X115 +	X125 +	X135 +	X145 < DX15
2	5	X215 +	X225 +	X235 +	X245 < DX25
3	5	X315 +	X325 +	X335 +	X345 < DX35
4	5	X415 +	X425 +	X435 +	X445 < DX45
1	6	X116 +	X126 +	X136 +	X146 < DX16
2	6	X216 +	X226 +	X236 +	X246 < DX26
3	6	X316 +	X326 +	X336 +	X346 < DX36
4	6	X416 +	X426 +	X436 +	X446 < DX46
1	7	X117 +	X127 +	X137 +	X147 < DX17
2	7	X217 +	X227 +	X237 +	X247 < DX27
3	7	X317 +	X327 +	X337 +	X347 < DX37
4	7	X417 +	X427 +	X437 +	X447 < DX47
1	8	X118 +	X128 +	X138 +	X148 < DX18
2	8	X218 +	X228 +	X238 +	X248 < DX28
3	8	X318 +	X328 +	X338 +	X348 < DX38
4	8	X418 +	X428 +	X438 +	X448 < DX48
1	9	X119 +	X129 +	X139 +	X149 < DX19
2	9	X219 +	X229 +	X239 +	X249 < DX29
3	9	X319 +	X329 +	X339 +	X349 < DX39
4	9	X419 +	X429 +	X439 +	X449 < DX49
1	10	X110 +	X120 +	X130 +	X140 < DX10
2	10	X210 +	X220 +	X230 +	X240 < DX20
3	10	X310 +	X320 +	X330 +	X340 < DX30
4	10	X410 +	X420 +	X430 +	X440 < DX40
1	11	X111 +	X121 +	X131 +	X141 < DX11
2	11	X211 +	X221 +	X231 +	X241 < DX21
3	11	X311 +	X321 +	X331 +	X341 < DX31
4	11	X411 +	X421 +	X431 +	X441 < DX41
1	12	X112 +	X122 +	X132 +	X142 < DX12
2	12	X212 +	X222 +	X232 +	X242 < DX22
3	12	X312 +	X322 +	X332 +	X342 < DX32
4	1	X411 +	X421 +	X431 +	X441 < DX41
1	13	X113 +	X123 +	X133 +	X143 < DX13
2	13	X213 +	X223 +	X233 +	X243 < DX23
3	13	X313 +	X323 +	X333 +	X343 < DX33
4	13	X413 +	X423 +	X433 +	X443 < DX43
1	14	X114 +	X124 +	X134 +	X144 < DX14
2	14	X214 +	X224 +	X234 +	X244 < DX24
3	14	X314 +	X324 +	X334 +	X344 < DX34
4	14	X414 +	X424 +	X434 +	X444 < DX44
1	15	X115 +	X125 +	X135 +	X145 < DX15
2	15	X215 +	X225 +	X235 +	X245 < DX25
3	15	X315 +	X325 +	X335 +	X345 < DX35
4	15	X415 +	X425 +	X435 +	X445 < DX45
1	16	X116 +	X126 +	X136 +	X146 < DX16
2	16	X216 +	X226 +	X236 +	X246 < DX26
3	16	X316 +	X326 +	X336 +	X346 < DX36
4	16	X416 +	X426 +	X436 +	X446 < DX46
1	17	X117 +	X127 +	X137 +	X147 < DX17
2	17	X217 +	X227 +	X237 +	X247 < DX27
3	17	X317 +	X327 +	X337 +	X347 < DX37
4	17	X417 +	X427 +	X437 +	X447 < DX47
1	18	X118 +	X128 +	X138 +	X148 < DX18
2	18	X218 +	X228 +	X238 +	X248 < DX28
3	18	X318 +	X328 +	X338 +	X348 < DX38
4	18	X418 +	X428 +	X438 +	X448 < DX48
1	19	X119 +	X129 +	X139 +	X149 < DX19
2	19	X219 +	X229 +	X239 +	X249 < DX29
3	19	X319 +	X329 +	X339 +	X349 < DX39
4	19	X419 +	X429 +	X439 +	X449 < DX49
1	20	X120 +	X120 +	X130 +	X140 < DX10
2	20	X2120 +	X2220 +	X2320 +	X2420 < DX20
3	20	X3120 +	X3220 +	X3320 +	X3420 < DX30
4	20	X4120 +	X4220 +	X4320 +	X4420 < DX40
1	21	X121 +	X121 +	X131 +	X141 < DX11
2	21	X2121 +	X2221 +	X2321 +	X2421 < DX21
3	21	X3121 +	X3221 +	X3321 +	X3421 < DX31
4	21	X4121 +	X4221 +	X4321 +	X4421 < DX41
1	22	X122 +	X122 +	X132 +	X142 < DX12
2	22	X2122 +	X2222 +	X2322 +	X2422 < DX22
3	22	X3122 +	X3222 +	X3322 +	X3422 < DX32
4	22	X4122 +	X4222 +	X4322 +	X4422 < DX42
1	23	X123 +	X123 +	X133 +	X143 < DX13
2	23	X2123 +	X2223 +	X2323 +	X2423 < DX23
3	23	X3123 +	X3223 +	X3323 +	X3423 < DX33
4	23	X4123 +	X4223 +	X4323 +	X4423 < DX43
1	24	X124 +	X124 +	X134 +	X144 < DX14
2	24	X2124 +	X2224 +	X2324 +	X2424 < DX24
3	24	X3124 +	X3224 +	X3324 +	X3424 < DX34
4	24	X4124 +	X4224 +	X4324 +	X4424 < DX44
1	25	X125 +	X125 +	X135 +	X145 < DX15
2	25	X2125 +	X2225 +	X2325 +	X2425 < DX25
3	25	X3125 +	X3225 +	X3325 +	X3425 < DX35
4	25	X4125 +	X4225 +	X4325 +	X4425 < DX45
1	26	X126 +	X126 +	X136 +	X146 < DX16
2	26	X2126 +	X2226 +	X2326 +	X2426 < DX26
3	26	X3126 +	X3226 +	X3326 +	X3426 < DX36
4	26	X4126 +	X4226 +	X4326 +	X4426 < DX46
1	27	X127 +	X127 +	X137 +	X147 < DX17
2	27	X2127 +	X2227 +	X2327 +	X2427 < DX27
3	27	X3127 +	X3227 +	X3327 +	X3427 < DX37
4	27	X4127 +	X4227 +	X4327 +	X4427 < DX47
1	28	X128 +	X128 +	X138 +	X148 < DX18
2	28	X2128 +	X2228 +	X2328 +	X2428 < DX28
3	28	X3128 +	X3228 +	X3328 +	X3428 < DX38
4	28	X4128 +	X4228 +	X4328 +	X4428 < DX48
1	29	X129 +	X129 +	X139 +	X149 < DX19
2	29	X2129 +	X2229 +	X2329 +	X2429 < DX29
3	29	X3129 +	X3229 +	X3329 +	X3429 < DX39
4	29	X4129 +	X4229 +	X4329 +	X4429 < DX49
1	30	X130 +	X130 +	X130 +	X140 < DX10
2	30	X2130 +	X2230 +	X2330 +	X2430 < DX20
3	30	X3130 +	X3230 +	X3330 +	X3430 < DX30
4	30	X4130 +	X4230 +	X4330 +	X4430 < DX40

## RESTRICCIONES DE DISPONIBILIDAD PARA LOS INGREDIENTES DEL TIPO 2

Ingrediente	Día	Lote			
		1	2	3	4
1	1	Y111 +	Y121 +	Y131 +	Y141 < DY11
2	1	Y211 +	Y221 +	Y231 +	Y241 < DY21
3	1	Y311 +	Y321 +	Y331 +	Y341 < DY31
4	1	Y411 +	Y421 +	Y431 +	Y441 < DY41
1	2	Y112 +	Y122 +	Y132 +	Y142 < DY12
2	2	Y212 +	Y222 +	Y232 +	Y242 < DY22
3	2	Y312 +	Y322 +	Y332 +	Y342 < DY32
4	2	Y412 +	Y422 +	Y432 +	Y442 < DY42
1	3	Y113 +	Y123 +	Y133 +	Y143 < DY13
2	3	Y213 +	Y223 +	Y233 +	Y243 < DY23
3	3	Y313 +	Y323 +	Y333 +	Y343 < DY33
4	3	Y413 +	Y423 +	Y433 +	Y443 < DY43
1	4	Y114 +	Y124 +	Y134 +	Y144 < DY14
2	4	Y214 +	Y224 +	Y234 +	Y244 < DY24
3	4	Y314 +	Y324 +	Y334 +	Y344 < DY34
4	4	Y414 +	Y424 +	Y434 +	Y444 < DY44
1	5	Y115 +	Y125 +	Y135 +	Y145 < DY15
2	5	Y215 +	Y225 +	Y235 +	Y245 < DY25
3	5	Y315 +	Y325 +	Y335 +	Y345 < DY35
4	5	Y415 +	Y425 +	Y435 +	Y445 < DY45
1	6	Y116 +	Y126 +	Y136 +	Y146 < DY16
2	6	Y216 +	Y226 +	Y236 +	Y246 < DY26
3	6	Y316 +	Y326 +	Y336 +	Y346 < DY36
4	6	Y416 +	Y426 +	Y436 +	Y446 < DY46
1	7	Y117 +	Y127 +	Y137 +	Y147 < DY17
2	7	Y217 +	Y227 +	Y237 +	Y247 < DY27
3	7	Y317 +	Y327 +	Y337 +	Y347 < DY37
4	7	Y417 +	Y427 +	Y437 +	Y447 < DY47
1	8	Y118 +	Y128 +	Y138 +	Y148 < DY18
2	8	Y218 +	Y228 +	Y238 +	Y248 < DY28
3	8	Y318 +	Y328 +	Y338 +	Y348 < DY38
4	8	Y418 +	Y428 +	Y438 +	Y448 < DY48
1	9	Y119 +	Y129 +	Y139 +	Y149 < DY19
2	9	Y219 +	Y229 +	Y239 +	Y249 < DY29
3	9	Y319 +	Y329 +	Y339 +	Y349 < DY39
4	9	Y419 +	Y429 +	Y439 +	Y449 < DY49
1	10	Y110 +	Y1210 +	Y1310 +	Y1410 < DY10
2	10	Y2110 +	Y2210 +	Y2310 +	Y2410 < DY210
3	10	Y3110 +	Y3210 +	Y3310 +	Y3410 < DY310
4	10	Y4110 +	Y4210 +	Y4310 +	Y4410 < DY410
1	11	Y1111 +	Y1211 +	Y1311 +	Y1411 < DY111
2	11	Y2111 +	Y2211 +	Y2311 +	Y2411 < DY211
3	11	Y3111 +	Y3211 +	Y3311 +	Y3411 < DY311
4	11	Y4111 +	Y4211 +	Y4311 +	Y4411 < DY411
1	12	Y1112 +	Y1212 +	Y1312 +	Y1412 < DY112
2	12	Y2112 +	Y2212 +	Y2312 +	Y2412 < DY212
3	12	Y3112 +	Y3212 +	Y3312 +	Y3412 < DY312
4	12	Y4112 +	Y4212 +	Y4312 +	Y4412 < DY412
1	13	Y1113 +	Y1213 +	Y1313 +	Y1413 < DY113
2	13	Y2113 +	Y2213 +	Y2313 +	Y2413 < DY213
3	13	Y3113 +	Y3213 +	Y3313 +	Y3413 < DY313
4	13	Y4113 +	Y4213 +	Y4313 +	Y4413 < DY413
1	14	Y1114 +	Y1214 +	Y1314 +	Y1414 < DY114
2	14	Y2114 +	Y2214 +	Y2314 +	Y2414 < DY214
3	14	Y3114 +	Y3214 +	Y3314 +	Y3414 < DY314
4	14	Y4114 +	Y4214 +	Y4314 +	Y4414 < DY414
1	15	Y1115 +	Y1215 +	Y1315 +	Y1415 < DY115
2	15	Y2115 +	Y2215 +	Y2315 +	Y2415 < DY215
3	15	Y3115 +	Y3215 +	Y3315 +	Y3415 < DY315
4	15	Y4115 +	Y4215 +	Y4315 +	Y4415 < DY415
1	16	Y1116 +	Y1216 +	Y1316 +	Y1416 < DY116
2	16	Y2116 +	Y2216 +	Y2316 +	Y2416 < DY216
3	16	Y3116 +	Y3216 +	Y3316 +	Y3416 < DY316
4	16	Y4116 +	Y4216 +	Y4316 +	Y4416 < DY416
1	17	Y1117 +	Y1217 +	Y1317 +	Y1417 < DY117
2	17	Y2117 +	Y2217 +	Y2317 +	Y2417 < DY217
3	17	Y3117 +	Y3217 +	Y3317 +	Y3417 < DY317
4	17	Y4117 +	Y4217 +	Y4317 +	Y4417 < DY417
1	18	Y1118 +	Y1218 +	Y1318 +	Y1418 < DY118
2	18	Y2118 +	Y2218 +	Y2318 +	Y2418 < DY218
3	18	Y3118 +	Y3218 +	Y3318 +	Y3418 < DY318
4	18	Y4118 +	Y4218 +	Y4318 +	Y4418 < DY418
1	19	Y1119 +	Y1219 +	Y1319 +	Y1419 < DY119
2	19	Y2119 +	Y2219 +	Y2319 +	Y2419 < DY219
3	19	Y3119 +	Y3219 +	Y3319 +	Y3419 < DY319
4	19	Y4119 +	Y4219 +	Y4319 +	Y4419 < DY419
1	20	Y1120 +	Y1220 +	Y1320 +	Y1420 < DY120
2	20	Y2120 +	Y2220 +	Y2320 +	Y2420 < DY220
3	20	Y3120 +	Y3220 +	Y3320 +	Y3420 < DY320
4	20	Y4120 +	Y4220 +	Y4320 +	Y4420 < DY420
1	21	Y1121 +	Y1221 +	Y1321 +	Y1421 < DY121
2	21	Y2121 +	Y2221 +	Y2321 +	Y2421 < DY221
3	21	Y3121 +	Y3221 +	Y3321 +	Y3421 < DY321
4	21	Y4121 +	Y4221 +	Y4321 +	Y4421 < DY421
1	22	Y1122 +	Y1222 +	Y1322 +	Y1422 < DY122
2	22	Y2122 +	Y2222 +	Y2322 +	Y2422 < DY222
3	22	Y3122 +	Y3222 +	Y3322 +	Y3422 < DY322
4	22	Y4122 +	Y4222 +	Y4322 +	Y4422 < DY422
1	23	Y1123 +	Y1223 +	Y1323 +	Y1423 < DY123
2	23	Y2123 +	Y2223 +	Y2323 +	Y2423 < DY223
3	23	Y3123 +	Y3223 +	Y3323 +	Y3423 < DY323
4	23	Y4123 +	Y4223 +	Y4323 +	Y4423 < DY423
1	24	Y1124 +	Y1224 +	Y1324 +	Y1424 < DY124
2	24	Y2124 +	Y2224 +	Y2324 +	Y2424 < DY224
3	24	Y3124 +	Y3224 +	Y3324 +	Y3424 < DY324
4	24	Y4124 +	Y4224 +	Y4324 +	Y4424 < DY424
1	25	Y1125 +	Y1225 +	Y1325 +	Y1425 < DY125
2	25	Y2125 +	Y2225 +	Y2325 +	Y2425 < DY225
3	25	Y3125 +	Y3225 +	Y3325 +	Y3425 < DY325
4	25	Y4125 +	Y4225 +	Y4325 +	Y4425 < DY425
1	26	Y1126 +	Y1226 +	Y1326 +	Y1426 < DY126
2	26	Y2126 +	Y2226 +	Y2326 +	Y2426 < DY226
3	26	Y3126 +	Y3226 +	Y3326 +	Y3426 < DY326
4	26	Y4126 +	Y4226 +	Y4326 +	Y4426 < DY426
1	27	Y1127 +	Y1227 +	Y1327 +	Y1427 < DY127
2	27	Y2127 +	Y2227 +	Y2327 +	Y2427 < DY227
3	27	Y3127 +	Y3227 +	Y3327 +	Y3427 < DY327
4	27	Y4127 +	Y4227 +	Y4327 +	Y4427 < DY427
1	28	Y1128 +	Y1228 +	Y1328 +	Y1428 < DY128
2	28	Y2128 +	Y2228 +	Y2328 +	Y2428 < DY228
3	28	Y3128 +	Y3228 +	Y3328 +	Y3428 < DY328
4	28	Y4128 +	Y4228 +	Y4328 +	Y4428 < DY428
1	29	Y1129 +	Y1229 +	Y1329 +	Y1429 < DY129
2	29	Y2129 +	Y2229 +	Y2329 +	Y2429 < DY229
3	29	Y3129 +	Y3229 +	Y3329 +	Y3429 < DY329
4	29	Y4129 +	Y4229 +	Y4329 +	Y4429 < DY429
1	30	Y1130 +	Y1230 +	Y1330 +	Y1430 < DY130
2	30	Y2130 +	Y2230 +	Y2330 +	Y2430 < DY230
3	30	Y3130 +	Y3230 +	Y3330 +	Y3430 < DY330
4	30	Y4130 +	Y4230 +	Y4330 +	Y4430 < DY430



RESTRICCIONES DE DISPOBLICACION PARA LOS INVESTIGADORES DEL TESIS







## RESTRICCIONES DE DISPONIBILIDAD PARA LOS COMBUSTIBLES

## Lote

Día	1	2	3	4	
1	V111 +	V121 +	V131 +	V141 +	< DC11
2	V112 +	V122 +	V132 +	V142 +	< DC12
3	V113 +	V123 +	V133 +	V143 +	< DC13
4	V114 +	V124 +	V134 +	V144 +	< DC14
5	V115 +	V125 +	V135 +	V145 +	< DC15
6	V116 +	V126 +	V136 +	V146 +	< DC16
7	V117 +	V127 +	V137 +	V147 +	< DC17
8	V118 +	V128 +	V138 +	V148 +	< DC18
9	V119 +	V129 +	V139 +	V149 +	< DC19
10	V1110 +	V1210 +	V1310 +	V1410 +	< DC10
11	V1111 +	V1211 +	V1311 +	V1411 +	< DC11
12	V1112 +	V1212 +	V1312 +	V1412 +	< DC12
13	V1113 +	V1213 +	V1313 +	V1413 +	< DC13
14	V1114 +	V1214 +	V1314 +	V1414 +	< DC14
15	V1115 +	V1215 +	V1315 +	V1415 +	< DC15
16	V1116 +	V1216 +	V1316 +	V1416 +	< DC16
17	V1117 +	V1217 +	V1317 +	V1417 +	< DC17
18	V1118 +	V1218 +	V1318 +	V1418 +	< DC18
19	V1119 +	V1219 +	V1319 +	V1419 +	< DC19
20	V1120 +	V1220 +	V1320 +	V1420 +	< DC20
21	V1121 +	V1221 +	V1321 +	V1421 +	< DC21
22	V1122 +	V1222 +	V1322 +	V1422 +	< DC22
23	V1123 +	V1223 +	V1323 +	V1423 +	< DC23
24	V1124 +	V1224 +	V1324 +	V1424 +	< DC24
25	V1125 +	V1225 +	V1325 +	V1425 +	< DC25
26	V1126 +	V1226 +	V1326 +	V1426 +	< DC26
27	V1127 +	V1227 +	V1327 +	V1427 +	< DC27
28	V1128 +	V1228 +	V1328 +	V1428 +	< DC28
29	V1129 +	V1229 +	V1329 +	V1429 +	< DC29
30	V1130 +	V1230 +	V1330 +	V1430 +	< DC30

## Lote

Día	1	2	3	4	
1	V211 +	V221 +	V231 +	V241 +	< DC21
2	V212 +	V222 +	V232 +	V242 +	< DC22
3	V213 +	V223 +	V233 +	V243 +	< DC23
4	V214 +	V224 +	V234 +	V244 +	< DC24
5	V215 +	V225 +	V235 +	V245 +	< DC25
6	V216 +	V226 +	V236 +	V246 +	< DC26
7	V217 +	V227 +	V237 +	V247 +	< DC27
8	V218 +	V228 +	V238 +	V248 +	< DC28
9	V219 +	V229 +	V239 +	V249 +	< DC29
10	V2110 +	V2210 +	V2310 +	V2410 +	< DC210
11	V2111 +	V2211 +	V2311 +	V2411 +	< DC211
12	V2112 +	V2212 +	V2312 +	V2412 +	< DC212
13	V2113 +	V2213 +	V2313 +	V2413 +	< DC213
14	V2114 +	V2214 +	V2314 +	V2414 +	< DC214
15	V2115 +	V2215 +	V2315 +	V2415 +	< DC215
16	V2116 +	V2216 +	V2316 +	V2416 +	< DC216
17	V2117 +	V2217 +	V2317 +	V2417 +	< DC217
18	V2118 +	V2218 +	V2318 +	V2418 +	< DC218
19	V2119 +	V2219 +	V2319 +	V2419 +	< DC219
20	V2120 +	V2220 +	V2320 +	V2420 +	< DC220
21	V2121 +	V2221 +	V2321 +	V2421 +	< DC221
22	V2122 +	V2222 +	V2322 +	V2422 +	< DC222
23	V2123 +	V2223 +	V2323 +	V2423 +	< DC223
24	V2124 +	V2224 +	V2324 +	V2424 +	< DC224
25	V2125 +	V2225 +	V2325 +	V2425 +	< DC225
26	V2126 +	V2226 +	V2326 +	V2426 +	< DC226
27	V2127 +	V2227 +	V2327 +	V2427 +	< DC227
28	V2128 +	V2228 +	V2328 +	V2428 +	< DC228
29	V2129 +	V2229 +	V2329 +	V2429 +	< DC229
30	V2130 +	V2230 +	V2330 +	V2430 +	< DC230

## Lote

Día	1	2	3	4	
1	V311 +	V321 +	V331 +	V341 +	< DC31
2	V312 +	V322 +	V332 +	V342 +	< DC32
3	V313 +	V323 +	V333 +	V343 +	< DC33
4	V314 +	V324 +	V334 +	V344 +	< DC34
5	V315 +	V325 +	V335 +	V345 +	< DC35
6	V316 +	V326 +	V336 +	V346 +	< DC36
7	V317 +	V327 +	V337 +	V347 +	< DC37
8	V318 +	V328 +	V338 +	V348 +	< DC38
9	V319 +	V329 +	V339 +	V349 +	< DC39
10	V3110 +	V3210 +	V3310 +	V3410 +	< DC310
11	V3111 +	V3211 +	V3311 +	V3411 +	< DC311
12	V3112 +	V3212 +	V3312 +	V3412 +	< DC312
13	V3113 +	V3213 +	V3313 +	V3413 +	< DC313
14	V3114 +	V3214 +	V3314 +	V3414 +	< DC314
15	V3115 +	V3215 +	V3315 +	V3415 +	< DC315
16	V3116 +	V3216 +	V3316 +	V3416 +	< DC316
17	V3117 +	V3217 +	V3317 +	V3417 +	< DC317
18	V3118 +	V3218 +	V3318 +	V3418 +	< DC318
19	V3119 +	V3219 +	V3319 +	V3419 +	< DC319
20	V3120 +	V3220 +	V3320 +	V3420 +	< DC320
21	V3121 +	V3221 +	V3321 +	V3421 +	< DC321
22	V3122 +	V3222 +	V3322 +	V3422 +	< DC322
23	V3123 +	V3223 +	V3323 +	V3423 +	< DC323
24	V3124 +	V3224 +	V3324 +	V3424 +	< DC324
25	V3125 +	V3225 +	V3325 +	V3425 +	< DC325
26	V3126 +	V3226 +	V3326 +	V3426 +	< DC326
27	V3127 +	V3227 +	V3327 +	V3427 +	< DC327
28	V3128 +	V3228 +	V3328 +	V3428 +	< DC328
29	V3129 +	V3229 +	V3329 +	V3429 +	< DC329
30	V3130 +	V3230 +	V3330 +	V3430 +	< DC330

## RESTRICCIONES PARA LA FORMACIÓN DE PELLETS

Lote	Día	
1	1	Y211 - Z111 = 0
2	1	Y221 - Z121 = 0
3	1	Y231 - Z131 = 0
4	1	Y241 - Z141 = 0
1	2	Y212 - Z112 = 0
2	2	Y222 - Z122 = 0
3	2	Y232 - Z132 = 0
4	2	Y242 - Z142 = 0
1	3	Y213 - Z113 = 0
2	3	Y223 - Z123 = 0
3	3	Y233 - Z133 = 0
4	3	Y243 - Z143 = 0
1	4	Y214 - Z114 = 0
2	4	Y224 - Z124 = 0
3	4	Y234 - Z134 = 0
4	4	Y244 - Z144 = 0
1	5	Y215 - Z115 = 0
2	5	Y225 - Z125 = 0
3	5	Y235 - Z135 = 0
4	5	Y245 - Z145 = 0
1	6	Y216 - Z116 = 0
2	6	Y226 - Z126 = 0
3	6	Y236 - Z136 = 0
4	6	Y246 - Z146 = 0
1	7	Y217 - Z117 = 0
2	7	Y227 - Z127 = 0
3	7	Y237 - Z137 = 0
4	7	Y247 - Z147 = 0
1	8	Y218 - Z118 = 0
2	8	Y228 - Z128 = 0
3	8	Y238 - Z138 = 0
4	8	Y248 - Z148 = 0
1	9	Y219 - Z119 = 0
2	9	Y229 - Z129 = 0
3	9	Y239 - Z139 = 0
4	9	Y249 - Z149 = 0
1	10	Y2110 - Z1110 = 0
2	10	Y2210 - Z1210 = 0
3	10	Y2310 - Z1310 = 0
4	10	Y2410 - Z1410 = 0
1	11	Y2111 - Z1111 = 0
2	11	Y2211 - Z1211 = 0
3	11	Y2311 - Z1311 = 0
4	11	Y2411 - Z1411 = 0
1	12	Y2112 - Z1112 = 0
2	12	Y2212 - Z1212 = 0
3	12	Y2312 - Z1312 = 0
4	12	Y2412 - Z1412 = 0
1	13	Y2113 - Z1113 = 0
2	13	Y2213 - Z1213 = 0
3	13	Y2313 - Z1313 = 0
4	13	Y2413 - Z1413 = 0
1	14	Y2114 - Z1114 = 0
2	14	Y2214 - Z1214 = 0
3	14	Y2314 - Z1314 = 0
4	14	Y2414 - Z1414 = 0
1	15	Y2115 - Z1115 = 0
2	15	Y2215 - Z1215 = 0
3	15	Y2315 - Z1315 = 0
4	15	Y2415 - Z1415 = 0
1	16	Y2116 - Z1116 = 0
2	16	Y2216 - Z1216 = 0
3	16	Y2316 - Z1316 = 0
4	16	Y2416 - Z1416 = 0
1	17	Y2117 - Z1117 = 0
2	17	Y2217 - Z1217 = 0
3	17	Y2317 - Z1317 = 0
4	17	Y2417 - Z1417 = 0
1	18	Y2118 - Z1118 = 0
2	18	Y2218 - Z1218 = 0
3	18	Y2318 - Z1318 = 0
4	18	Y2418 - Z1418 = 0
1	19	Y2119 - Z1119 = 0
2	19	Y2219 - Z1219 = 0
3	19	Y2319 - Z1319 = 0
4	19	Y2419 - Z1419 = 0
1	20	Y2120 - Z1120 = 0
2	20	Y2220 - Z1220 = 0
3	20	Y2320 - Z1320 = 0
4	20	Y2420 - Z1420 = 0
1	21	Y2121 - Z1121 = 0
2	21	Y2221 - Z1221 = 0
3	21	Y2321 - Z1321 = 0
4	21	Y2421 - Z1421 = 0
1	22	Y2122 - Z1122 = 0
2	22	Y2222 - Z1222 = 0
3	22	Y2322 - Z1322 = 0
4	22	Y2422 - Z1422 = 0
1	23	Y2123 - Z1123 = 0
2	23	Y2223 - Z1223 = 0
3	23	Y2323 - Z1323 = 0
4	23	Y2423 - Z1423 = 0
1	24	Y2124 - Z1124 = 0
2	24	Y2224 - Z1224 = 0
3	24	Y2324 - Z1324 = 0
4	24	Y2424 - Z1424 = 0
1	25	Y2125 - Z1125 = 0
2	25	Y2225 - Z1225 = 0
3	25	Y2325 - Z1325 = 0
4	25	Y2425 - Z1425 = 0
1	26	Y2126 - Z1126 = 0
2	26	Y2226 - Z1226 = 0
3	26	Y2326 - Z1326 = 0
4	26	Y2426 - Z1426 = 0
1	27	Y2127 - Z1127 = 0
2	27	Y2227 - Z1227 = 0
3	27	Y2327 - Z1327 = 0
4	27	Y2427 - Z1427 = 0
1	28	Y2128 - Z1128 = 0
2	28	Y2228 - Z1228 = 0
3	28	Y2328 - Z1328 = 0
4	28	Y2428 - Z1428 = 0
1	29	Y2129 - Z1129 = 0
2	29	Y2229 - Z1229 = 0
3	29	Y2329 - Z1329 = 0
4	29	Y2429 - Z1429 = 0
1	30	Y2130 - Z1130 = 0
2	30	Y2230 - Z1230 = 0
3	30	Y2330 - Z1330 = 0
4	30	Y2430 - Z1430 = 0

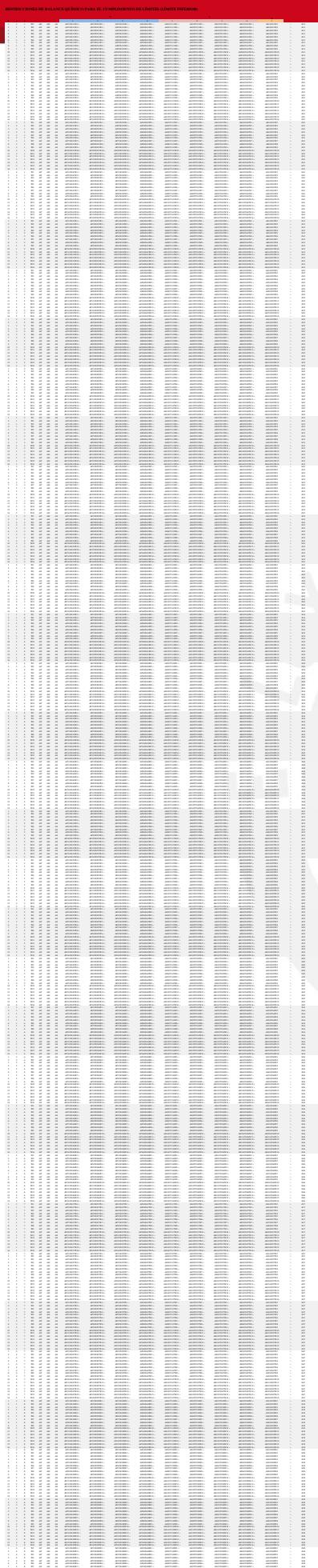
RESTRICCIÓN DE BAJAS QUEDAN PARA EL COMPLEMENTO DE LÍMITES AL DÍA DE HOY.

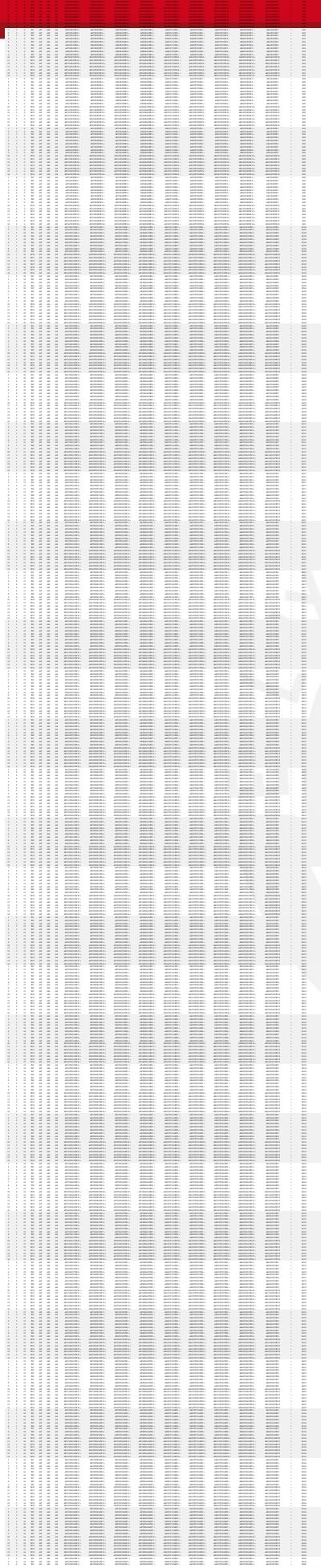




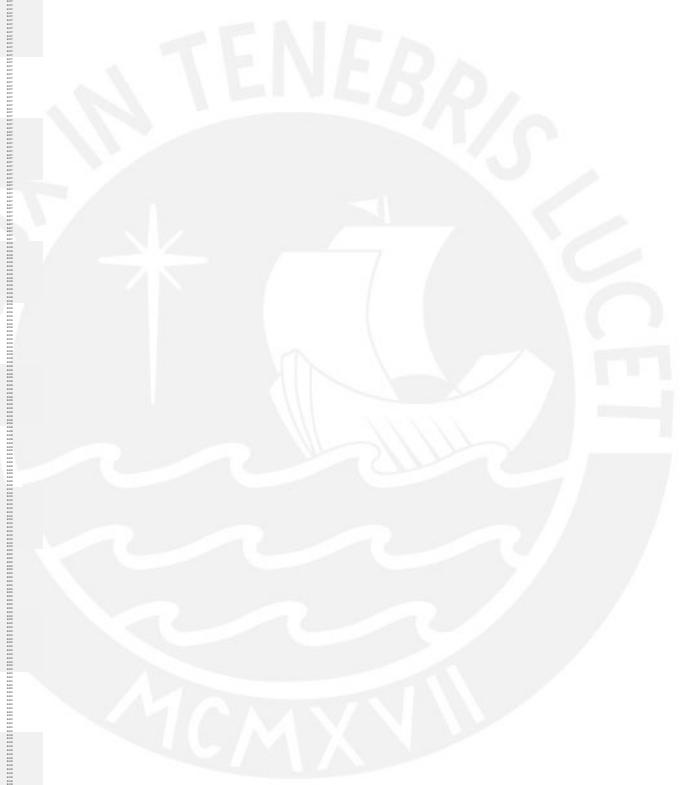












## RESTRICCIONES PARA EL EMPLEO DE LOS INGREDIENTES DEL TIPO 1 (Hj,k)

Lote	Día	Y		Z	
		1	2	1	
1	1	Y111 +	Y211 +	Z111 -	H11 = 0
2	1	Y121 +	Y221 +	Z121 -	H21 = 0
3	1	Y131 +	Y231 +	Z131 -	H31 = 0
4	1	Y141 +	Y241 +	Z141 -	H41 = 0
1	2	Y112 +	Y212 +	Z112 -	H12 = 0
2	2	Y122 +	Y222 +	Z122 -	H22 = 0
3	2	Y132 +	Y232 +	Z132 -	H32 = 0
4	2	Y142 +	Y242 +	Z142 -	H42 = 0
1	3	Y113 +	Y213 +	Z113 -	H13 = 0
2	3	Y123 +	Y223 +	Z123 -	H23 = 0
3	3	Y133 +	Y233 +	Z133 -	H33 = 0
4	3	Y143 +	Y243 +	Z143 -	H43 = 0
1	4	Y114 +	Y214 +	Z114 -	H14 = 0
2	4	Y124 +	Y224 +	Z124 -	H24 = 0
3	4	Y134 +	Y234 +	Z134 -	H34 = 0
4	4	Y144 +	Y244 +	Z144 -	H44 = 0
1	5	Y115 +	Y215 +	Z115 -	H15 = 0
2	5	Y125 +	Y225 +	Z125 -	H25 = 0
3	5	Y135 +	Y235 +	Z135 -	H35 = 0
4	5	Y145 +	Y245 +	Z145 -	H45 = 0
1	6	Y116 +	Y216 +	Z116 -	H16 = 0
2	6	Y126 +	Y226 +	Z126 -	H26 = 0
3	6	Y136 +	Y236 +	Z136 -	H36 = 0
4	6	Y146 +	Y246 +	Z146 -	H46 = 0
1	7	Y117 +	Y217 +	Z117 -	H17 = 0
2	7	Y127 +	Y227 +	Z127 -	H27 = 0
3	7	Y137 +	Y237 +	Z137 -	H37 = 0
4	7	Y147 +	Y247 +	Z147 -	H47 = 0
1	8	Y118 +	Y218 +	Z118 -	H18 = 0
2	8	Y128 +	Y228 +	Z128 -	H28 = 0
3	8	Y138 +	Y238 +	Z138 -	H38 = 0
4	8	Y148 +	Y248 +	Z148 -	H48 = 0
1	9	Y119 +	Y219 +	Z119 -	H19 = 0
2	9	Y129 +	Y229 +	Z129 -	H29 = 0
3	9	Y139 +	Y239 +	Z139 -	H39 = 0
4	9	Y149 +	Y249 +	Z149 -	H49 = 0
1	10	Y110 +	Y210 +	Z110 -	H10 = 0
2	10	Y120 +	Y220 +	Z120 -	H20 = 0
3	10	Y130 +	Y230 +	Z130 -	H30 = 0
4	10	Y140 +	Y240 +	Z140 -	H40 = 0
1	11	Y111 +	Y211 +	Z111 -	H11 = 0
2	11	Y121 +	Y221 +	Z121 -	H21 = 0
3	11	Y131 +	Y231 +	Z131 -	H31 = 0
4	11	Y141 +	Y241 +	Z141 -	H41 = 0
1	12	Y112 +	Y212 +	Z112 -	H12 = 0
2	12	Y122 +	Y222 +	Z122 -	H22 = 0
3	12	Y132 +	Y232 +	Z132 -	H32 = 0
4	12	Y142 +	Y242 +	Z142 -	H42 = 0
1	13	Y113 +	Y213 +	Z113 -	H13 = 0
2	13	Y123 +	Y223 +	Z123 -	H23 = 0
3	13	Y133 +	Y233 +	Z133 -	H33 = 0
4	13	Y143 +	Y243 +	Z143 -	H43 = 0
1	14	Y114 +	Y214 +	Z114 -	H14 = 0
2	14	Y124 +	Y224 +	Z124 -	H24 = 0
3	14	Y134 +	Y234 +	Z134 -	H34 = 0
4	14	Y144 +	Y244 +	Z144 -	H44 = 0
1	15	Y115 +	Y215 +	Z115 -	H15 = 0
2	15	Y125 +	Y225 +	Z125 -	H25 = 0
3	15	Y135 +	Y235 +	Z135 -	H35 = 0
4	15	Y145 +	Y245 +	Z145 -	H45 = 0
1	16	Y116 +	Y216 +	Z116 -	H16 = 0
2	16	Y126 +	Y226 +	Z126 -	H26 = 0
3	16	Y136 +	Y236 +	Z136 -	H36 = 0
4	16	Y146 +	Y246 +	Z146 -	H46 = 0
1	17	Y117 +	Y217 +	Z117 -	H17 = 0
2	17	Y127 +	Y227 +	Z127 -	H27 = 0
3	17	Y137 +	Y237 +	Z137 -	H37 = 0
4	17	Y147 +	Y247 +	Z147 -	H47 = 0
1	18	Y118 +	Y218 +	Z118 -	H18 = 0
2	18	Y128 +	Y228 +	Z128 -	H28 = 0
3	18	Y138 +	Y238 +	Z138 -	H38 = 0
4	18	Y148 +	Y248 +	Z148 -	H48 = 0
1	19	Y119 +	Y219 +	Z119 -	H19 = 0
2	19	Y129 +	Y229 +	Z129 -	H29 = 0
3	19	Y139 +	Y239 +	Z139 -	H39 = 0
4	19	Y149 +	Y249 +	Z149 -	H49 = 0
1	20	Y120 +	Y220 +	Z120 -	H20 = 0
2	20	Y1220 +	Y2220 +	Z1220 -	H220 = 0
3	20	Y1320 +	Y2320 +	Z1320 -	H320 = 0
4	20	Y1420 +	Y2420 +	Z1420 -	H420 = 0
1	21	Y121 +	Y221 +	Z121 -	H21 = 0
2	21	Y1221 +	Y2221 +	Z1221 -	H221 = 0
3	21	Y1321 +	Y2321 +	Z1321 -	H321 = 0
4	21	Y1421 +	Y2421 +	Z1421 -	H421 = 0
1	22	Y122 +	Y222 +	Z122 -	H22 = 0
2	22	Y1222 +	Y2222 +	Z1222 -	H222 = 0
3	22	Y1322 +	Y2322 +	Z1322 -	H322 = 0
4	22	Y1422 +	Y2422 +	Z1422 -	H422 = 0
1	23	Y123 +	Y223 +	Z123 -	H23 = 0
2	23	Y1223 +	Y2223 +	Z1223 -	H223 = 0
3	23	Y1323 +	Y2323 +	Z1323 -	H323 = 0
4	23	Y1423 +	Y2423 +	Z1423 -	H423 = 0
1	24	Y124 +	Y224 +	Z124 -	H24 = 0
2	24	Y1224 +	Y2224 +	Z1224 -	H224 = 0
3	24	Y1324 +	Y2324 +	Z1324 -	H324 = 0
4	24	Y1424 +	Y2424 +	Z1424 -	H424 = 0
1	25	Y125 +	Y225 +	Z125 -	H25 = 0
2	25	Y1225 +	Y2225 +	Z1225 -	H225 = 0
3	25	Y1325 +	Y2325 +	Z1325 -	H325 = 0
4	25	Y1425 +	Y2425 +	Z1425 -	H425 = 0
1	26	Y126 +	Y226 +	Z126 -	H26 = 0
2	26	Y1226 +	Y2226 +	Z1226 -	H226 = 0
3	26	Y1326 +	Y2326 +	Z1326 -	H326 = 0
4	26	Y1426 +	Y2426 +	Z1426 -	H426 = 0
1	27	Y127 +	Y227 +	Z127 -	H27 = 0
2	27	Y1227 +	Y2227 +	Z1227 -	H227 = 0
3	27	Y1327 +	Y2327 +	Z1327 -	H327 = 0
4	27	Y1427 +	Y2427 +	Z1427 -	H427 = 0
1	28	Y128 +	Y228 +	Z128 -	H28 = 0
2	28	Y1228 +	Y2228 +	Z1228 -	H228 = 0
3	28	Y1328 +	Y2328 +	Z1328 -	H328 = 0
4	28	Y1428 +	Y2428 +	Z1428 -	H428 = 0
1	29	Y129 +	Y229 +	Z129 -	H29 = 0
2	29	Y1229 +	Y2229 +	Z1229 -	H229 = 0
3	29	Y1329 +	Y2329 +	Z1329 -	H329 = 0
4	29	Y1429 +	Y2429 +	Z1429 -	H429 = 0
1	30	Y130 +	Y230 +	Z130 -	H30 = 0
2	30	Y1230 +	Y2230 +	Z1230 -	H230 = 0
3	30	Y1330 +	Y2330 +	Z1330 -	H330 = 0
4	30	Y1430 +	Y2430 +	Z1430 -	H430 = 0

## RESTRICCIONES PARA EL EMPLEO DE LOS INGREDIENTES DEL TIPO 1 (para X1,j,k y X2,j,k)

Lote	Día	X	1	2
1	1	X111 - rH11 > 0	X211 - r2H11 > 0	
2	1	X121 - rH21 > 0	X221 - r2H21 > 0	
3	1	X131 - rH31 > 0	X231 - r2H31 > 0	
4	1	X141 - rH41 > 0	X241 - r2H41 > 0	
1	2	X112 - rH12 > 0	X212 - r2H12 > 0	
2	2	X122 - rH22 > 0	X222 - r2H22 > 0	
3	2	X132 - rH32 > 0	X232 - r2H32 > 0	
4	2	X142 - rH42 > 0	X242 - r2H42 > 0	
1	3	X113 - rH13 > 0	X213 - r2H13 > 0	
2	3	X123 - rH23 > 0	X223 - r2H23 > 0	
3	3	X133 - rH33 > 0	X233 - r2H33 > 0	
4	3	X143 - rH43 > 0	X243 - r2H43 > 0	
1	4	X114 - rH14 > 0	X214 - r2H14 > 0	
2	4	X124 - rH24 > 0	X224 - r2H24 > 0	
3	4	X134 - rH34 > 0	X234 - r2H34 > 0	
4	4	X144 - rH44 > 0	X244 - r2H44 > 0	
1	5	X115 - rH15 > 0	X215 - r2H15 > 0	
2	5	X125 - rH25 > 0	X225 - r2H25 > 0	
3	5	X135 - rH35 > 0	X235 - r2H35 > 0	
4	5	X145 - rH45 > 0	X245 - r2H45 > 0	
1	6	X116 - rH16 > 0	X216 - r2H16 > 0	
2	6	X126 - rH26 > 0	X226 - r2H26 > 0	
3	6	X136 - rH36 > 0	X236 - r2H36 > 0	
4	6	X146 - rH46 > 0	X246 - r2H46 > 0	
1	7	X117 - rH17 > 0	X217 - r2H17 > 0	
2	7	X127 - rH27 > 0	X227 - r2H27 > 0	
3	7	X137 - rH37 > 0	X237 - r2H37 > 0	
4	7	X147 - rH47 > 0	X247 - r2H47 > 0	
1	8	X118 - rH18 > 0	X218 - r2H18 > 0	
2	8	X128 - rH28 > 0	X228 - r2H28 > 0	
3	8	X138 - rH38 > 0	X238 - r2H38 > 0	
4	8	X148 - rH48 > 0	X248 - r2H48 > 0	
1	9	X119 - rH19 > 0	X219 - r2H19 > 0	
2	9	X129 - rH29 > 0	X229 - r2H29 > 0	
3	9	X139 - rH39 > 0	X239 - r2H39 > 0	
4	9	X149 - rH49 > 0	X249 - r2H49 > 0	
1	10	X110 - rH10 > 0	X210 - r2H10 > 0	
2	10	X120 - rH20 > 0	X220 - r2H20 > 0	
3	10	X130 - rH30 > 0	X230 - r2H30 > 0	
4	10	X140 - rH40 > 0	X240 - r2H40 > 0	
1	11	X111 - rH11 > 0	X211 - r2H11 > 0	
2	11	X121 - rH21 > 0	X221 - r2H21 > 0	
3	11	X131 - rH31 > 0	X231 - r2H31 > 0	
4	11	X141 - rH41 > 0	X241 - r2H41 > 0	
1	12	X112 - rH12 > 0	X212 - r2H12 > 0	
2	12	X122 - rH22 > 0	X222 - r2H22 > 0	
3	12	X132 - rH32 > 0	X232 - r2H32 > 0	
4	12	X142 - rH42 > 0	X242 - r2H42 > 0	
1	13	X113 - rH13 > 0	X213 - r2H13 > 0	
2	13	X123 - rH23 > 0	X223 - r2H23 > 0	
3	13	X133 - rH33 > 0	X233 - r2H33 > 0	
4	13	X143 - rH43 > 0	X243 - r2H43 > 0	
1	14	X114 - rH14 > 0	X214 - r2H14 > 0	
2	14	X124 - rH24 > 0	X224 - r2H24 > 0	
3	14	X134 - rH34 > 0	X234 - r2H34 > 0	
4	14	X144 - rH44 > 0	X244 - r2H44 > 0	
1	15	X115 - rH15 > 0	X215 - r2H15 > 0	
2	15	X125 - rH25 > 0	X225 - r2H25 > 0	
3	15	X135 - rH35 > 0	X235 - r2H35 > 0	
4	15	X145 - rH45 > 0	X245 - r2H45 > 0	
1	16	X116 - rH16 > 0	X216 - r2H16 > 0	
2	16	X126 - rH26 > 0	X226 - r2H26 > 0	
3	16	X136 - rH36 > 0	X236 - r2H36 > 0	
4	16	X146 - rH46 > 0	X246 - r2H46 > 0	
1	17	X117 - rH17 > 0	X217 - r2H17 > 0	
2	17	X127 - rH27 > 0	X227 - r2H27 > 0	
3	17	X137 - rH37 > 0	X237 - r2H37 > 0	
4	17	X147 - rH47 > 0	X247 - r2H47 > 0	
1	18	X118 - rH18 > 0	X218 - r2H18 > 0	
2	18	X128 - rH28 > 0	X228 - r2H28 > 0	
3	18	X138 - rH38 > 0	X238 - r2H38 > 0	
4	18	X148 - rH48 > 0	X248 - r2H48 > 0	
1	19	X119 - rH19 > 0	X219 - r2H19 > 0	
2	19	X129 - rH29 > 0	X229 - r2H29 > 0	
3	19	X139 - rH39 > 0	X239 - r2H39 > 0	
4	19	X149 - rH49 > 0	X249 - r2H49 > 0	
1	20	X110 - rH10 > 0	X210 - r2H10 > 0	
2	20	X120 - rH20 > 0	X220 - r2H20 > 0	
3	20	X130 - rH30 > 0	X230 - r2H30 > 0	
4	20	X140 - rH40 > 0	X240 - r2H40 > 0	
1	21	X1121 - rH121 > 0	X2121 - r2H121 > 0	
2	21	X1221 - rH221 > 0	X2221 - r2H221 > 0	
3	21	X1321 - rH321 > 0	X2321 - r2H321 > 0	
4	21	X1421 - rH421 > 0	X2421 - r2H421 > 0	
1	22	X1122 - rH122 > 0	X2122 - r2H122 > 0	
2	22	X1222 - rH222 > 0	X2222 - r2H222 > 0	
3	22	X1322 - rH322 > 0	X2322 - r2H322 > 0	
4	22	X1422 - rH422 > 0	X2422 - r2H422 > 0	
1	23	X1123 - rH123 > 0	X2123 - r2H123 > 0	
2	23	X1223 - rH223 > 0	X2223 - r2H223 > 0	
3	23	X1323 - rH323 > 0	X2323 - r2H323 > 0	
4	23	X1423 - rH423 > 0	X2423 - r2H423 > 0	
1	24	X1124 - rH124 > 0	X2124 - r2H124 > 0	
2	24	X1224 - rH224 > 0	X2224 - r2H224 > 0	
3	24	X1324 - rH324 > 0	X2324 - r2H324 > 0	
4	24	X1424 - rH424 > 0	X2424 - r2H424 > 0	
1	25	X1125 - rH125 > 0	X2125 - r2H125 > 0	
2	25	X1225 - rH225 > 0	X2225 - r2H225 > 0	
3	25	X1325 - rH325 > 0	X2325 - r2H325 > 0	
4	25	X1425 - rH425 > 0	X2425 - r2H425 > 0	
1	26	X1126 - rH126 > 0	X2126 - r2H126 > 0	
2	26	X1226 - rH226 > 0	X2226 - r2H226 > 0	
3	26	X1326 - rH326 > 0	X2326 - r2H326 > 0	
4	26	X1426 - rH426 > 0	X2426 - r2H426 > 0	
1	27	X1127 - rH127 > 0	X2127 - r2H127 > 0	
2	27	X1227 - rH227 > 0	X2227 - r2H227 > 0	
3	27	X1327 - rH327 > 0	X2327 - r2H327 > 0	
4	27	X1427 - rH427 > 0	X2427 - r2H427 > 0	
1	28	X1128 - rH128 > 0	X2128 - r2H128 > 0	
2	28	X1228 - rH228 > 0	X2228 - r2H228 > 0	
3	28	X1328 - rH328 > 0	X2328 - r2H328 > 0	
4	28	X1428 - rH428 > 0	X2428 - r2H428 > 0	
1	29	X1129 - rH129 > 0	X2129 - r2H129 > 0	
2	29	X1229 - rH229 > 0	X2229 - r2H229 > 0	
3	29	X1329 - rH329 > 0	X2329 - r2H329 > 0	
4	29	X1429 - rH429 > 0	X2429 - r2H429 > 0	
1	30	X1130 - rH130 > 0	X2130 - r2H130 > 0	
2	30	X1230 - rH230 > 0	X2230 - r2H230 > 0	
3	30	X1330 - rH330 > 0	X2330 - r2H330 > 0	
4	30	X1430 - rH430 > 0	X2430 - r2H430 > 0	

## RESTRICCIONES PARA EL EMPLEO DE LOS INGREDIENTES DEL TIPO 1 (para X3,j,k y X4,j,k)

Lote	Día	X	3	4
1	1	X311 - <N11> > 0	X411 - <N11> > 0	
2	1	X321 - <N21> > 0	X421 - <N21> > 0	
3	1	X331 - <N31> > 0	X431 - <N31> > 0	
4	1	X341 - <N41> > 0	X441 - <N41> > 0	
1	2	X312 - <N12> > 0	X412 - <N12> > 0	
2	2	X322 - <N22> > 0	X422 - <N22> > 0	
3	2	X332 - <N32> > 0	X432 - <N32> > 0	
4	2	X342 - <N42> > 0	X442 - <N42> > 0	
1	3	X313 - <N13> > 0	X413 - <N13> > 0	
2	3	X323 - <N23> > 0	X423 - <N23> > 0	
3	3	X333 - <N33> > 0	X433 - <N33> > 0	
4	3	X343 - <N43> > 0	X443 - <N43> > 0	
1	4	X314 - <N14> > 0	X414 - <N14> > 0	
2	4	X324 - <N24> > 0	X424 - <N24> > 0	
3	4	X334 - <N34> > 0	X434 - <N34> > 0	
4	4	X344 - <N44> > 0	X444 - <N44> > 0	
1	5	X315 - <N15> > 0	X415 - <N15> > 0	
2	5	X325 - <N25> > 0	X425 - <N25> > 0	
3	5	X335 - <N35> > 0	X435 - <N35> > 0	
4	5	X345 - <N45> > 0	X445 - <N45> > 0	
1	6	X316 - <N16> > 0	X416 - <N16> > 0	
2	6	X326 - <N26> > 0	X426 - <N26> > 0	
3	6	X336 - <N36> > 0	X436 - <N36> > 0	
4	6	X346 - <N46> > 0	X446 - <N46> > 0	
1	7	X317 - <N17> > 0	X417 - <N17> > 0	
2	7	X327 - <N27> > 0	X427 - <N27> > 0	
3	7	X337 - <N37> > 0	X437 - <N37> > 0	
4	7	X347 - <N47> > 0	X447 - <N47> > 0	
1	8	X318 - <N18> > 0	X418 - <N18> > 0	
2	8	X328 - <N28> > 0	X428 - <N28> > 0	
3	8	X338 - <N38> > 0	X438 - <N38> > 0	
4	8	X348 - <N48> > 0	X448 - <N48> > 0	
1	9	X319 - <N19> > 0	X419 - <N19> > 0	
2	9	X329 - <N29> > 0	X429 - <N29> > 0	
3	9	X339 - <N39> > 0	X439 - <N39> > 0	
4	9	X349 - <N49> > 0	X449 - <N49> > 0	
1	10	X3110 - <N110> > 0	X4110 - <N110> > 0	
2	10	X3210 - <N210> > 0	X4210 - <N210> > 0	
3	10	X3310 - <N310> > 0	X4310 - <N310> > 0	
4	10	X3410 - <N410> > 0	X4410 - <N410> > 0	
1	11	X3111 - <N111> > 0	X4111 - <N111> > 0	
2	11	X3211 - <N211> > 0	X4211 - <N211> > 0	
3	11	X3311 - <N311> > 0	X4311 - <N311> > 0	
4	11	X3411 - <N411> > 0	X4411 - <N411> > 0	
1	12	X3112 - <N112> > 0	X4112 - <N112> > 0	
2	12	X3212 - <N212> > 0	X4212 - <N212> > 0	
3	12	X3312 - <N312> > 0	X4312 - <N312> > 0	
4	12	X3412 - <N412> > 0	X4412 - <N412> > 0	
1	13	X3113 - <N113> > 0	X4113 - <N113> > 0	
2	13	X3213 - <N213> > 0	X4213 - <N213> > 0	
3	13	X3313 - <N313> > 0	X4313 - <N313> > 0	
4	13	X3413 - <N413> > 0	X4413 - <N413> > 0	
1	14	X3114 - <N114> > 0	X4114 - <N114> > 0	
2	14	X3214 - <N214> > 0	X4214 - <N214> > 0	
3	14	X3314 - <N314> > 0	X4314 - <N314> > 0	
4	14	X3414 - <N414> > 0	X4414 - <N414> > 0	
1	15	X3115 - <N115> > 0	X4115 - <N115> > 0	
2	15	X3215 - <N215> > 0	X4215 - <N215> > 0	
3	15	X3315 - <N315> > 0	X4315 - <N315> > 0	
4	15	X3415 - <N415> > 0	X4415 - <N415> > 0	
1	16	X3116 - <N116> > 0	X4116 - <N116> > 0	
2	16	X3216 - <N216> > 0	X4216 - <N216> > 0	
3	16	X3316 - <N316> > 0	X4316 - <N316> > 0	
4	16	X3416 - <N416> > 0	X4416 - <N416> > 0	
1	17	X3117 - <N117> > 0	X4117 - <N117> > 0	
2	17	X3217 - <N217> > 0	X4217 - <N217> > 0	
3	17	X3317 - <N317> > 0	X4317 - <N317> > 0	
4	17	X3417 - <N417> > 0	X4417 - <N417> > 0	
1	18	X3118 - <N118> > 0	X4118 - <N118> > 0	
2	18	X3218 - <N218> > 0	X4218 - <N218> > 0	
3	18	X3318 - <N318> > 0	X4318 - <N318> > 0	
4	18	X3418 - <N418> > 0	X4418 - <N418> > 0	
1	19	X3119 - <N119> > 0	X4119 - <N119> > 0	
2	19	X3219 - <N219> > 0	X4219 - <N219> > 0	
3	19	X3319 - <N319> > 0	X4319 - <N319> > 0	
4	19	X3419 - <N419> > 0	X4419 - <N419> > 0	
1	20	X3120 - <N120> > 0	X4120 - <N120> > 0	
2	20	X3220 - <N220> > 0	X4220 - <N220> > 0	
3	20	X3320 - <N320> > 0	X4320 - <N320> > 0	
4	20	X3420 - <N420> > 0	X4420 - <N420> > 0	
1	21	X3121 - <N121> > 0	X4121 - <N121> > 0	
2	21	X3221 - <N221> > 0	X4221 - <N221> > 0	
3	21	X3321 - <N321> > 0	X4321 - <N321> > 0	
4	21	X3421 - <N421> > 0	X4421 - <N421> > 0	
1	22	X3122 - <N122> > 0	X4122 - <N122> > 0	
2	22	X3222 - <N222> > 0	X4222 - <N222> > 0	
3	22	X3322 - <N322> > 0	X4322 - <N322> > 0	
4	22	X3422 - <N422> > 0	X4422 - <N422> > 0	
1	23	X3123 - <N123> > 0	X4123 - <N123> > 0	
2	23	X3223 - <N223> > 0	X4223 - <N223> > 0	
3	23	X3323 - <N323> > 0	X4323 - <N323> > 0	
4	23	X3423 - <N423> > 0	X4423 - <N423> > 0	
1	24	X3124 - <N124> > 0	X4124 - <N124> > 0	
2	24	X3224 - <N224> > 0	X4224 - <N224> > 0	
3	24	X3324 - <N324> > 0	X4324 - <N324> > 0	
4	24	X3424 - <N424> > 0	X4424 - <N424> > 0	
1	25	X3125 - <N125> > 0	X4125 - <N125> > 0	
2	25	X3225 - <N225> > 0	X4225 - <N225> > 0	
3	25	X3325 - <N325> > 0	X4325 - <N325> > 0	
4	25	X3425 - <N425> > 0	X4425 - <N425> > 0	
1	26	X3126 - <N126> > 0	X4126 - <N126> > 0	
2	26	X3226 - <N226> > 0	X4226 - <N226> > 0	
3	26	X3326 - <N326> > 0	X4326 - <N326> > 0	
4	26	X3426 - <N426> > 0	X4426 - <N426> > 0	
1	27	X3127 - <N127> > 0	X4127 - <N127> > 0	
2	27	X3227 - <N227> > 0	X4227 - <N227> > 0	
3	27	X3327 - <N327> > 0	X4327 - <N327> > 0	
4	27	X3427 - <N427> > 0	X4427 - <N427> > 0	
1	28	X3128 - <N128> > 0	X4128 - <N128> > 0	
2	28	X3228 - <N228> > 0	X4228 - <N228> > 0	
3	28	X3328 - <N328> > 0	X4328 - <N328> > 0	
4	28	X3428 - <N428> > 0	X4428 - <N428> > 0	
1	29	X3129 - <N129> > 0	X4129 - <N129> > 0	
2	29	X3229 - <N229> > 0	X4229 - <N229> > 0	
3	29	X3329 - <N329> > 0	X4329 - <N329> > 0	
4	29	X3429 - <N429> > 0	X4429 - <N429> > 0	
1	30	X3130 - <N130> > 0	X4130 - <N130> > 0	
2	30	X3230 - <N230> > 0	X4230 - <N230> > 0	
3	30	X3330 - <N330> > 0	X4330 - <N330> > 0	
4	30	X3430 - <N430> > 0	X4430 - <N430> > 0	

RESTRICCIONES PARA EL EMPLEO DE LOS INGREDIENTES DEL TIPO 1 (relación entre X<sub>1,j,k</sub> y X<sub>2,j,k</sub>)

Lote	Día		X	
			1	2
1	1	pr	pxX111 -	pxX211 > 0
2	1	pr	pxX121 -	pxX221 > 0
3	1	pr	pxX131 -	pxX231 > 0
4	1	pr	pxX141 -	pxX241 > 0
1	2	pr	pxX112 -	pxX212 > 0
2	2	pr	pxX122 -	pxX222 > 0
3	2	pr	pxX132 -	pxX232 > 0
4	2	pr	pxX142 -	pxX242 > 0
1	3	pr	pxX113 -	pxX213 > 0
2	3	pr	pxX123 -	pxX223 > 0
3	3	pr	pxX133 -	pxX233 > 0
4	3	pr	pxX143 -	pxX243 > 0
1	4	pr	pxX114 -	pxX214 > 0
2	4	pr	pxX124 -	pxX224 > 0
3	4	pr	pxX134 -	pxX234 > 0
4	4	pr	pxX144 -	pxX244 > 0
1	5	pr	pxX115 -	pxX215 > 0
2	5	pr	pxX125 -	pxX225 > 0
3	5	pr	pxX135 -	pxX235 > 0
4	5	pr	pxX145 -	pxX245 > 0
1	6	pr	pxX116 -	pxX216 > 0
2	6	pr	pxX126 -	pxX226 > 0
3	6	pr	pxX136 -	pxX236 > 0
4	6	pr	pxX146 -	pxX246 > 0
1	7	pr	pxX117 -	pxX217 > 0
2	7	pr	pxX127 -	pxX227 > 0
3	7	pr	pxX137 -	pxX237 > 0
4	7	pr	pxX147 -	pxX247 > 0
1	8	pr	pxX118 -	pxX218 > 0
2	8	pr	pxX128 -	pxX228 > 0
3	8	pr	pxX138 -	pxX238 > 0
4	8	pr	pxX148 -	pxX248 > 0
1	9	pr	pxX119 -	pxX219 > 0
2	9	pr	pxX129 -	pxX229 > 0
3	9	pr	pxX139 -	pxX239 > 0
4	9	pr	pxX149 -	pxX249 > 0
1	10	pr	pxX110 -	pxX210 > 0
2	10	pr	pxX120 -	pxX220 > 0
3	10	pr	pxX130 -	pxX230 > 0
4	10	pr	pxX140 -	pxX240 > 0
1	11	pr	pxX111 -	pxX211 > 0
2	11	pr	pxX121 -	pxX221 > 0
3	11	pr	pxX131 -	pxX231 > 0
4	11	pr	pxX141 -	pxX241 > 0
1	12	pr	pxX112 -	pxX212 > 0
2	12	pr	pxX122 -	pxX222 > 0
3	12	pr	pxX132 -	pxX232 > 0
4	12	pr	pxX142 -	pxX242 > 0
1	13	pr	pxX113 -	pxX213 > 0
2	13	pr	pxX123 -	pxX223 > 0
3	13	pr	pxX133 -	pxX233 > 0
4	13	pr	pxX143 -	pxX243 > 0
1	14	pr	pxX114 -	pxX214 > 0
2	14	pr	pxX124 -	pxX224 > 0
3	14	pr	pxX134 -	pxX234 > 0
4	14	pr	pxX144 -	pxX244 > 0
1	15	pr	pxX115 -	pxX215 > 0
2	15	pr	pxX125 -	pxX225 > 0
3	15	pr	pxX135 -	pxX235 > 0
4	15	pr	pxX145 -	pxX245 > 0
1	16	pr	pxX116 -	pxX216 > 0
2	16	pr	pxX126 -	pxX226 > 0
3	16	pr	pxX136 -	pxX236 > 0
4	16	pr	pxX146 -	pxX246 > 0
1	17	pr	pxX117 -	pxX217 > 0
2	17	pr	pxX127 -	pxX227 > 0
3	17	pr	pxX137 -	pxX237 > 0
4	17	pr	pxX147 -	pxX247 > 0
1	18	pr	pxX118 -	pxX218 > 0
2	18	pr	pxX128 -	pxX228 > 0
3	18	pr	pxX138 -	pxX238 > 0
4	18	pr	pxX148 -	pxX248 > 0
1	19	pr	pxX119 -	pxX219 > 0
2	19	pr	pxX129 -	pxX229 > 0
3	19	pr	pxX139 -	pxX239 > 0
4	19	pr	pxX149 -	pxX249 > 0
1	20	pr	pxX110 -	pxX210 > 0
2	20	pr	pxX120 -	pxX220 > 0
3	20	pr	pxX130 -	pxX230 > 0
4	20	pr	pxX140 -	pxX240 > 0
1	21	pr	pxX111 -	pxX211 > 0
2	21	pr	pxX121 -	pxX221 > 0
3	21	pr	pxX131 -	pxX231 > 0
4	21	pr	pxX141 -	pxX241 > 0
1	22	pr	pxX112 -	pxX212 > 0
2	22	pr	pxX122 -	pxX222 > 0
3	22	pr	pxX132 -	pxX232 > 0
4	22	pr	pxX142 -	pxX242 > 0
1	23	pr	pxX113 -	pxX213 > 0
2	23	pr	pxX123 -	pxX223 > 0
3	23	pr	pxX133 -	pxX233 > 0
4	23	pr	pxX143 -	pxX243 > 0
1	24	pr	pxX114 -	pxX214 > 0
2	24	pr	pxX124 -	pxX224 > 0
3	24	pr	pxX134 -	pxX234 > 0
4	24	pr	pxX144 -	pxX244 > 0
1	25	pr	pxX115 -	pxX215 > 0
2	25	pr	pxX125 -	pxX225 > 0
3	25	pr	pxX135 -	pxX235 > 0
4	25	pr	pxX145 -	pxX245 > 0
1	26	pr	pxX116 -	pxX216 > 0
2	26	pr	pxX126 -	pxX226 > 0
3	26	pr	pxX136 -	pxX236 > 0
4	26	pr	pxX146 -	pxX246 > 0
1	27	pr	pxX117 -	pxX217 > 0
2	27	pr	pxX127 -	pxX227 > 0
3	27	pr	pxX137 -	pxX237 > 0
4	27	pr	pxX147 -	pxX247 > 0
1	28	pr	pxX118 -	pxX218 > 0
2	28	pr	pxX128 -	pxX228 > 0
3	28	pr	pxX138 -	pxX238 > 0
4	28	pr	pxX148 -	pxX248 > 0
1	29	pr	pxX119 -	pxX219 > 0
2	29	pr	pxX129 -	pxX229 > 0
3	29	pr	pxX139 -	pxX239 > 0
4	29	pr	pxX149 -	pxX249 > 0
1	30	pr	pxX110 -	pxX210 > 0
2	30	pr	pxX120 -	pxX220 > 0
3	30	pr	pxX130 -	pxX230 > 0
4	30	pr	pxX140 -	pxX240 > 0

## RESTRICCIONES PARA EL EMPLEO DE LOS COMBUSTIBLES

Lote	Día	V	1	2	3
1	1	V111 - fN11 > 0	V211 - fN211 > 0	V311 - fN311 > 0	
2	1	V121 - fN212 > 0	V221 - fN212 > 0	V321 - fN212 > 0	
3	1	V131 - fN313 > 0	V231 - fN313 > 0	V331 - fN313 > 0	
4	1	V141 - fN414 > 0	V241 - fN414 > 0	V341 - fN414 > 0	
1	2	V112 - fN12 > 0	V212 - fN212 > 0	V312 - fN212 > 0	
2	2	V122 - fN22 > 0	V222 - fN22 > 0	V322 - fN22 > 0	
3	2	V132 - fN32 > 0	V232 - fN32 > 0	V332 - fN32 > 0	
4	2	V142 - fN42 > 0	V242 - fN42 > 0	V342 - fN42 > 0	
1	3	V113 - fN13 > 0	V213 - fN213 > 0	V313 - fN313 > 0	
2	3	V123 - fN23 > 0	V223 - fN23 > 0	V323 - fN23 > 0	
3	3	V133 - fN33 > 0	V233 - fN33 > 0	V333 - fN33 > 0	
4	3	V143 - fN43 > 0	V243 - fN43 > 0	V343 - fN43 > 0	
1	4	V114 - fN14 > 0	V214 - fN214 > 0	V314 - fN314 > 0	
2	4	V124 - fN24 > 0	V224 - fN24 > 0	V324 - fN24 > 0	
3	4	V134 - fN34 > 0	V234 - fN34 > 0	V334 - fN34 > 0	
4	4	V144 - fN44 > 0	V244 - fN44 > 0	V344 - fN44 > 0	
1	5	V115 - fN15 > 0	V215 - fN215 > 0	V315 - fN315 > 0	
2	5	V125 - fN25 > 0	V225 - fN25 > 0	V325 - fN25 > 0	
3	5	V135 - fN35 > 0	V235 - fN35 > 0	V335 - fN35 > 0	
4	5	V145 - fN45 > 0	V245 - fN45 > 0	V345 - fN45 > 0	
1	6	V116 - fN16 > 0	V216 - fN216 > 0	V316 - fN316 > 0	
2	6	V126 - fN26 > 0	V226 - fN26 > 0	V326 - fN26 > 0	
3	6	V136 - fN36 > 0	V236 - fN36 > 0	V336 - fN36 > 0	
4	6	V146 - fN46 > 0	V246 - fN46 > 0	V346 - fN46 > 0	
1	7	V117 - fN17 > 0	V217 - fN217 > 0	V317 - fN317 > 0	
2	7	V127 - fN27 > 0	V227 - fN27 > 0	V327 - fN27 > 0	
3	7	V137 - fN37 > 0	V237 - fN37 > 0	V337 - fN37 > 0	
4	7	V147 - fN47 > 0	V247 - fN47 > 0	V347 - fN47 > 0	
1	8	V118 - fN18 > 0	V218 - fN218 > 0	V318 - fN318 > 0	
2	8	V128 - fN28 > 0	V228 - fN28 > 0	V328 - fN28 > 0	
3	8	V138 - fN38 > 0	V238 - fN38 > 0	V338 - fN38 > 0	
4	8	V148 - fN48 > 0	V248 - fN48 > 0	V348 - fN48 > 0	
1	9	V119 - fN19 > 0	V219 - fN219 > 0	V319 - fN319 > 0	
2	9	V129 - fN29 > 0	V229 - fN29 > 0	V329 - fN29 > 0	
3	9	V139 - fN39 > 0	V239 - fN39 > 0	V339 - fN39 > 0	
4	9	V149 - fN49 > 0	V249 - fN49 > 0	V349 - fN49 > 0	
1	10	V110 - fN10 > 0	V210 - fN210 > 0	V310 - fN310 > 0	
2	10	V1210 - fN210 > 0	V2210 - fN210 > 0	V3210 - fN210 > 0	
3	10	V1310 - fN310 > 0	V2310 - fN310 > 0	V3310 - fN310 > 0	
4	10	V1410 - fN410 > 0	V2410 - fN410 > 0	V3410 - fN410 > 0	
1	11	V1111 - fN111 > 0	V2111 - fN211 > 0	V3111 - fN311 > 0	
2	11	V1211 - fN211 > 0	V2211 - fN211 > 0	V3211 - fN211 > 0	
3	11	V1311 - fN311 > 0	V2311 - fN311 > 0	V3311 - fN311 > 0	
4	11	V1411 - fN411 > 0	V2411 - fN411 > 0	V3411 - fN411 > 0	
1	12	V1112 - fN112 > 0	V2112 - fN212 > 0	V3112 - fN312 > 0	
2	12	V1212 - fN212 > 0	V2212 - fN212 > 0	V3212 - fN212 > 0	
3	12	V1312 - fN312 > 0	V2312 - fN312 > 0	V3312 - fN312 > 0	
4	12	V1412 - fN412 > 0	V2412 - fN412 > 0	V3412 - fN412 > 0	
1	13	V1113 - fN113 > 0	V2113 - fN213 > 0	V3113 - fN313 > 0	
2	13	V1213 - fN213 > 0	V2213 - fN213 > 0	V3213 - fN313 > 0	
3	13	V1313 - fN313 > 0	V2313 - fN313 > 0	V3313 - fN313 > 0	
4	13	V1413 - fN413 > 0	V2413 - fN413 > 0	V3413 - fN413 > 0	
1	14	V1114 - fN114 > 0	V2114 - fN214 > 0	V3114 - fN314 > 0	
2	14	V1214 - fN214 > 0	V2214 - fN214 > 0	V3214 - fN214 > 0	
3	14	V1314 - fN314 > 0	V2314 - fN314 > 0	V3314 - fN314 > 0	
4	14	V1414 - fN414 > 0	V2414 - fN414 > 0	V3414 - fN414 > 0	
1	15	V1115 - fN115 > 0	V2115 - fN215 > 0	V3115 - fN315 > 0	
2	15	V1215 - fN215 > 0	V2215 - fN215 > 0	V3215 - fN215 > 0	
3	15	V1315 - fN315 > 0	V2315 - fN315 > 0	V3315 - fN315 > 0	
4	15	V1415 - fN415 > 0	V2415 - fN415 > 0	V3415 - fN415 > 0	
1	16	V1116 - fN116 > 0	V2116 - fN216 > 0	V3116 - fN316 > 0	
2	16	V1216 - fN216 > 0	V2216 - fN216 > 0	V3216 - fN216 > 0	
3	16	V1316 - fN316 > 0	V2316 - fN316 > 0	V3316 - fN316 > 0	
4	16	V1416 - fN416 > 0	V2416 - fN416 > 0	V3416 - fN416 > 0	
1	17	V1117 - fN117 > 0	V2117 - fN217 > 0	V3117 - fN317 > 0	
2	17	V1217 - fN217 > 0	V2217 - fN217 > 0	V3217 - fN217 > 0	
3	17	V1317 - fN317 > 0	V2317 - fN317 > 0	V3317 - fN317 > 0	
4	17	V1417 - fN417 > 0	V2417 - fN417 > 0	V3417 - fN417 > 0	
1	18	V1118 - fN118 > 0	V2118 - fN218 > 0	V3118 - fN318 > 0	
2	18	V1218 - fN218 > 0	V2218 - fN218 > 0	V3218 - fN218 > 0	
3	18	V1318 - fN318 > 0	V2318 - fN318 > 0	V3318 - fN318 > 0	
4	18	V1418 - fN418 > 0	V2418 - fN418 > 0	V3418 - fN418 > 0	
1	19	V1119 - fN119 > 0	V2119 - fN219 > 0	V3119 - fN319 > 0	
2	19	V1219 - fN219 > 0	V2219 - fN219 > 0	V3219 - fN219 > 0	
3	19	V1319 - fN319 > 0	V2319 - fN319 > 0	V3319 - fN319 > 0	
4	19	V1419 - fN419 > 0	V2419 - fN419 > 0	V3419 - fN419 > 0	
1	20	V1120 - fN120 > 0	V2120 - fN220 > 0	V3120 - fN320 > 0	
2	20	V1220 - fN220 > 0	V2220 - fN220 > 0	V3220 - fN220 > 0	
3	20	V1320 - fN320 > 0	V2320 - fN320 > 0	V3320 - fN320 > 0	
4	20	V1420 - fN420 > 0	V2420 - fN420 > 0	V3420 - fN420 > 0	
1	21	V1121 - fN121 > 0	V2121 - fN221 > 0	V3121 - fN321 > 0	
2	21	V1221 - fN221 > 0	V2221 - fN221 > 0	V3221 - fN321 > 0	
3	21	V1321 - fN321 > 0	V2321 - fN321 > 0	V3321 - fN321 > 0	
4	21	V1421 - fN421 > 0	V2421 - fN421 > 0	V3421 - fN421 > 0	
1	22	V1122 - fN122 > 0	V2122 - fN222 > 0	V3122 - fN322 > 0	
2	22	V1222 - fN222 > 0	V2222 - fN222 > 0	V3222 - fN222 > 0	
3	22	V1322 - fN322 > 0	V2322 - fN322 > 0	V3322 - fN322 > 0	
4	22	V1422 - fN422 > 0	V2422 - fN422 > 0	V3422 - fN422 > 0	
1	23	V1123 - fN123 > 0	V2123 - fN223 > 0	V3123 - fN323 > 0	
2	23	V1223 - fN223 > 0	V2223 - fN223 > 0	V3223 - fN323 > 0	
3	23	V1323 - fN323 > 0	V2323 - fN323 > 0	V3323 - fN323 > 0	
4	23	V1423 - fN423 > 0	V2423 - fN423 > 0	V3423 - fN423 > 0	
1	24	V1124 - fN124 > 0	V2124 - fN224 > 0	V3124 - fN324 > 0	
2	24	V1224 - fN224 > 0	V2224 - fN224 > 0	V3224 - fN324 > 0	
3	24	V1324 - fN324 > 0	V2324 - fN324 > 0	V3324 - fN324 > 0	
4	24	V1424 - fN424 > 0	V2424 - fN424 > 0	V3424 - fN424 > 0	
1	25	V1125 - fN125 > 0	V2125 - fN225 > 0	V3125 - fN325 > 0	
2	25	V1225 - fN225 > 0	V2225 - fN225 > 0	V3225 - fN325 > 0	
3	25	V1325 - fN325 > 0	V2325 - fN325 > 0	V3325 - fN325 > 0	
4	25	V1425 - fN425 > 0	V2425 - fN425 > 0	V3425 - fN425 > 0	
1	26	V1126 - fN126 > 0	V2126 - fN226 > 0	V3126 - fN326 > 0	
2	26	V1226 - fN226 > 0	V2226 - fN226 > 0	V3226 - fN326 > 0	
3	26	V1326 - fN326 > 0	V2326 - fN326 > 0	V3326 - fN326 > 0	
4	26	V1426 - fN426 > 0	V2426 - fN426 > 0	V3426 - fN426 > 0	
1	27	V1127 - fN127 > 0	V2127 - fN227 > 0	V3127 - fN327 > 0	
2	27	V1227 - fN227 > 0	V2227 - fN227 > 0	V3227 - fN327 > 0	
3	27	V1327 - fN327 > 0	V2327 - fN327 > 0	V3327 - fN327 > 0	
4	27	V1427 - fN427 > 0	V2427 - fN427 > 0	V3427 - fN427 > 0	
1	28	V1128 - fN128 > 0	V2128 - fN228 > 0	V3128 - fN328 > 0	
2	28	V1228 - fN228 > 0	V2228 - fN228 > 0	V3228 - fN328 > 0	
3	28	V1328 - fN328 > 0	V2328 - fN328 > 0	V3328 - fN328 > 0	
4	28	V1428 - fN428 > 0	V2428 - fN428 > 0	V3428 - fN428 > 0	
1	29	V1129 - fN129 > 0	V2129 - fN229 > 0	V3129 - fN329 > 0	
2	29	V1229 - fN229 > 0	V2229 - fN229 > 0	V3229 - fN329 > 0	
3	29	V1329 - fN329 > 0	V2329 - fN329 > 0	V3329 - fN329 > 0	
4	29	V1429 - fN429 > 0	V2429 - fN429 > 0	V3429 - fN429 > 0	
1	30	V1130 - fN130 > 0	V2130 - fN230 > 0	V3130 - fN330 > 0	
2	30	V1230 - fN230 > 0	V2230 - fN230 > 0	V3230 - fN330 > 0	
3	30	V1330 - fN330 > 0	V2330 - fN330 > 0	V3330 - fN330 > 0	
4	30	V1430 - fN430 > 0	V2430 - fN430 > 0	V3430 - fN430 > 0	

# TESIS PUCP



PONTIFICIA  
UNIVERSIDAD  
CATÓLICA  
DEL PERÚ

## FUNCIÓN OBJETIVO

COSTO DE X1				COSTO DE X2				COSTO DE X3				COSTO DE X4							
1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
Día	1	2	3	4	Día	1	2	3	4	Día	1	2	3	4	Día	1	2	3	4
1	345.49X111+	345.49X112+	345.49X113+	345.49X114+	1	345.49X211+	345.49X212+	345.49X213+	345.49X214+	1	709.58X311+	709.58X312+	709.58X313+	709.58X314+	1	128.04X411+	128.04X421+	128.04X431+	128.04X441+
2	345.49X112+	345.49X113+	345.49X114+	345.49X115+	2	345.49X212+	345.49X213+	345.49X214+	345.49X215+	2	709.58X312+	709.58X313+	709.58X314+	709.58X315+	2	128.04X412+	128.04X422+	128.04X432+	128.04X442+
3	345.49X113+	345.49X114+	345.49X115+	345.49X116+	3	345.49X213+	345.49X214+	345.49X215+	345.49X216+	3	709.58X313+	709.58X314+	709.58X315+	709.58X316+	3	128.04X413+	128.04X423+	128.04X433+	128.04X443+
4	345.49X114+	345.49X115+	345.49X116+	345.49X117+	4	345.49X214+	345.49X215+	345.49X216+	345.49X217+	4	709.58X314+	709.58X315+	709.58X316+	709.58X317+	4	128.04X414+	128.04X424+	128.04X434+	128.04X444+
5	345.49X115+	345.49X116+	345.49X117+	345.49X118+	5	345.49X215+	345.49X216+	345.49X217+	345.49X218+	5	709.58X315+	709.58X316+	709.58X317+	709.58X318+	5	128.04X415+	128.04X425+	128.04X435+	128.04X445+
6	345.49X116+	345.49X117+	345.49X118+	345.49X119+	6	345.49X216+	345.49X217+	345.49X218+	345.49X219+	6	709.58X316+	709.58X317+	709.58X318+	709.58X319+	6	128.04X416+	128.04X426+	128.04X436+	128.04X446+
7	345.49X117+	345.49X118+	345.49X119+	345.49X120+	7	345.49X217+	345.49X218+	345.49X219+	345.49X220+	7	709.58X317+	709.58X318+	709.58X319+	709.58X320+	7	128.04X417+	128.04X427+	128.04X437+	128.04X447+
8	345.49X118+	345.49X119+	345.49X120+	345.49X121+	8	345.49X218+	345.49X219+	345.49X220+	345.49X221+	8	709.58X318+	709.58X319+	709.58X320+	709.58X321+	8	128.04X418+	128.04X428+	128.04X438+	128.04X448+
9	345.49X119+	345.49X120+	345.49X121+	345.49X122+	9	345.49X219+	345.49X220+	345.49X221+	345.49X222+	9	709.58X319+	709.58X320+	709.58X321+	709.58X322+	9	128.04X419+	128.04X429+	128.04X439+	128.04X449+
10	345.49X120+	345.49X121+	345.49X122+	345.49X123+	10	345.49X220+	345.49X221+	345.49X222+	345.49X223+	10	709.58X320+	709.58X321+	709.58X322+	709.58X323+	10	128.04X410+	128.04X420+	128.04X430+	128.04X440+
11	345.49X121+	345.49X122+	345.49X123+	345.49X124+	11	345.49X221+	345.49X222+	345.49X223+	345.49X224+	11	709.58X321+	709.58X322+	709.58X323+	709.58X324+	11	128.04X411+	128.04X421+	128.04X431+	128.04X441+
12	345.49X122+	345.49X123+	345.49X124+	345.49X125+	12	345.49X222+	345.49X223+	345.49X224+	345.49X225+	12	709.58X322+	709.58X323+	709.58X324+	709.58X325+	12	128.04X412+	128.04X422+	128.04X432+	128.04X442+
13	345.49X123+	345.49X124+	345.49X125+	345.49X126+	13	345.49X223+	345.49X224+	345.49X225+	345.49X226+	13	709.58X323+	709.58X324+	709.58X325+	709.58X326+	13	128.04X413+	128.04X423+	128.04X433+	128.04X443+
14	345.49X124+	345.49X125+	345.49X126+	345.49X127+	14	345.49X224+	345.49X225+	345.49X226+	345.49X227+	14	709.58X324+	709.58X325+	709.58X326+	709.58X327+	14	128.04X414+	128.04X424+	128.04X434+	128.04X444+
15	345.49X125+	345.49X126+	345.49X127+	345.49X128+	15	345.49X225+	345.49X226+	345.49X227+	345.49X228+	15	709.58X325+	709.58X326+	709.58X327+	709.58X328+	15	128.04X415+	128.04X425+	128.04X435+	128.04X445+
16	345.49X126+	345.49X127+	345.49X128+	345.49X129+	16	345.49X226+	345.49X227+	345.49X228+	345.49X229+	16	709.58X326+	709.58X327+	709.58X328+	709.58X329+	16	128.04X416+	128.04X426+	128.04X436+	128.04X446+
17	345.49X127+	345.49X128+	345.49X129+	345.49X130+	17	345.49X227+	345.49X228+	345.49X229+	345.49X230+	17	709.58X327+	709.58X328+	709.58X329+	709.58X330+	17	128.04X417+	128.04X427+	128.04X437+	128.04X447+
18	345.49X128+	345.49X129+	345.49X130+	345.49X131+	18	345.49X228+	345.49X229+	345.49X230+	345.49X231+	18	709.58X328+	709.58X329+	709.58X330+	709.58X331+	18	128.04X418+	128.04X428+	128.04X438+	128.04X448+
19	345.49X129+	345.49X130+	345.49X131+	345.49X132+	19	345.49X229+	345.49X230+	345.49X231+	345.49X232+	19	709.58X329+	709.58X330+	709.58X331+	709.58X332+	19	128.04X419+	128.04X429+	128.04X439+	128.04X449+
20	345.49X130+	345.49X131+	345.49X132+	345.49X133+	20	345.49X230+	345.49X231+	345.49X232+	345.49X233+	20	709.58X330+	709.58X331+	709.58X332+	709.58X333+	20	128.04X420+	128.04X430+	128.04X440+	128.04X450+
21	345.49X131+	345.49X132+	345.49X133+	345.49X134+	21	345.49X231+	345.49X232+	345.49X233+	345.49X234+	21	709.58X331+	709.58X332+	709.58X333+	709.58X334+	21	128.04X421+	128.04X431+	128.04X441+	128.04X451+
22	345.49X132+	345.49X133+	345.49X134+	345.49X135+	22	345.49X232+	345.49X233+	345.49X234+	345.49X235+	22	709.58X332+	709.58X333+	709.58X334+	709.58X335+	22	128.04X422+	128.04X432+	128.04X442+	128.04X452+
23	345.49X133+	345.49X134+	345.49X135+	345.49X136+	23	345.49X233+	345.49X234+	345.49X235+	345.49X236+	23	709.58X333+	709.58X334+	709.58X335+	709.58X336+	23	128.04X423+	128.04X433+	128.04X443+	128.04X453+
24	345.49X134+	345.49X135+	345.49X136+	345.49X137+	24	345.49X234+	345.49X235+	345.49X236+	345.49X237+	24	709.58X334+	709.58X335+	709.58X336+	709.58X337+	24	128.04X424+	128.04X434+	128.04X444+	128.04X454+
25	345.49X135+	345.49X136+	345.49X137+	345.49X138+	25	345.49X235+	345.49X236+	345.49X237+	345.49X238+	25	709.58X335+	709.58X336+	709.58X337+	709.58X338+	25	128.04X425+	128.04X435+	128.04X445+	128.04X455+
26	345.49X136+	345.49X137+	345.49X138+	345.49X139+	26	345.49X236+	345.49X237+	345.49X238+	345.49X239+	26	709.58X336+	709.58X337+	709.58X338+	709.58X339+	26	128.04X426+	128.04X436+	128.04X446+	128.04X456+
27	345.49X137+	345.49X138+	345.49X139+	345.49X140+	27	345.49X237+	345.49X238+	345.49X239+	345.49X240+	27	709.58X337+	709.58X338+	709.58X339+	709.58X340+	27	128.04X427+	128.04X437+	128.04X447+	128.04X457+
28	345.49X138+	345.49X139+	345.49X140+	345.49X141+	28	345.49X238+	345.49X239+	345.49X240+	345.49X241+	28	709.58X338+	709.58X339+	709.58X340+	709.58X341+	28	128.04X428+	128.04X438+	128.04X448+	128.04X458+
29	345.49X139+	345.49X140+	345.49X141+	345.49X142+	29	345.49X239+	345.49X240+	345.49X241+	345.49X242+	29	709.58X339+	709.58X340+	709.58X341+	709.58X342+	29	128.04X429+	128.04X439+	128.04X449+	128.04X459+
30	345.49X140+	345.49X141+	345.49X142+	345.49X143+	30	345.49X240+	345.49X241+	345.49X242+	345.49X243+	30	709.58X340+	709.58X341+	709.58X342+	709.58X343+	30	128.04X430+	128.04X440+	128.04X450+	128.04X460+

COSTO DE Y1				COSTO DE Y2				COSTO DE Y3				COSTO DE Y4							
1	2	3	4	1	2	3	4	1	2	3	4	1	2	3	4				
Día	1	2	3	4	Día	1	2	3	4	Día	1	2	3	4	Día	1	2	3	4
1	29.12211+	29.12221+	29.12231+	29.12241+	1	6.92V211+	6.92V212+	6.92V213+	6.92V214+	1	264.52V311+	264.52V312+	264.52V313+	264.52V314+	1	6.9Y411+	6.9Y421+	6.9Y431+	6.9Y441+
2	29.12212+	29.12222+	29.12232+	29.12242+	2	6.92V212+	6.92V213+	6.92V214+	6.92V215+	2	264.52V312+	264.52V313+	264.52V314+	264.52V315+	2	6.9Y412+	6.9Y422+	6.9Y432+	6.9Y442+
3	29.12213+	29.12223+	29.12233+	29.12243+	3	6.92V213+	6.92V214+	6.92V215+	6.92V216+	3	264.52V313+	264.52V314+	264.52V315+	264.52V316+	3	6.9Y413+	6.9Y423+	6.9Y433+	6.9Y443+
4	29.12214+	29.12224+	29.12234+	29.12244+	4	6.92V214+	6.92V215+	6.92V216+	6.92V217+	4	264.52V314+	264.52V315+	264.52V316+	264.52V317+	4	6.9Y414+	6.9Y424+	6.9Y434+	6.9Y444+
5	29.12215+	29.12225+	29.12235+	29.12245+	5	6.92V215+	6.92V216+	6.92V217+	6.92V218+	5	264.52V315+	264.52V316+	264.52V317+	264.52V318+	5	6.9Y415+	6.9Y425+	6.9Y435+	6.9Y445+
6	29.12216+	29.12226+	29.12236+	29.12246+	6	6.92V216+													

## RESTRICCIONES DE CAPACIDAD

Lote	Día	X				Y				Z						
		1	2	3	4	1	2	3	4	1	2	3	4			
1	1	X111+	X211+	X311+	X411+	Y111+	Y211+	Y311+	Y411+	Z111-	N11	=	0	N11	<	130
2	1	X121+	X221+	X321+	X421+	Y121+	Y221+	Y321+	Y421+	Z121-	N21	=	0	N21	<	130
3	1	X131+	X231+	X331+	X431+	Y131+	Y231+	Y331+	Y431+	Z131-	N31	=	0	N31	<	130
4	1	X141+	X241+	X341+	X441+	Y141+	Y241+	Y341+	Y441+	Z141-	N41	=	0	N41	<	130
1	2	X112+	X212+	X312+	X412+	Y112+	Y212+	Y312+	Y412+	Z112-	N12	=	0	N12	<	130
2	2	X122+	X222+	X322+	X422+	Y122+	Y222+	Y322+	Y422+	Z122-	N22	=	0	N22	<	130
3	2	X132+	X232+	X332+	X432+	Y132+	Y232+	Y332+	Y432+	Z132-	N32	=	0	N32	<	130
4	2	X142+	X242+	X342+	X442+	Y142+	Y242+	Y342+	Y442+	Z142-	N42	=	0	N42	<	130
1	3	X113+	X213+	X313+	X413+	Y113+	Y213+	Y313+	Y413+	Z113-	N13	=	0	N13	<	130
2	3	X123+	X223+	X323+	X423+	Y123+	Y223+	Y323+	Y423+	Z123-	N23	=	0	N23	<	130
3	3	X133+	X233+	X333+	X433+	Y133+	Y233+	Y333+	Y433+	Z133-	N33	=	0	N33	<	130
4	3	X143+	X243+	X343+	X443+	Y143+	Y243+	Y343+	Y443+	Z143-	N43	=	0	N43	<	130
1	4	X114+	X214+	X314+	X414+	Y114+	Y214+	Y314+	Y414+	Z114-	N14	=	0	N14	<	130
2	4	X124+	X224+	X324+	X424+	Y124+	Y224+	Y324+	Y424+	Z124-	N24	=	0	N24	<	130
3	4	X134+	X234+	X334+	X434+	Y134+	Y234+	Y334+	Y434+	Z134-	N34	=	0	N34	<	130
4	4	X144+	X244+	X344+	X444+	Y144+	Y244+	Y344+	Y444+	Z144-	N44	=	0	N44	<	130
1	5	X115+	X215+	X315+	X415+	Y115+	Y215+	Y315+	Y415+	Z115-	N15	=	0	N15	<	130
2	5	X125+	X225+	X325+	X425+	Y125+	Y225+	Y325+	Y425+	Z125-	N25	=	0	N25	<	130
3	5	X135+	X235+	X335+	X435+	Y135+	Y235+	Y335+	Y435+	Z135-	N35	=	0	N35	<	130
4	5	X145+	X245+	X345+	X445+	Y145+	Y245+	Y345+	Y445+	Z145-	N45	=	0	N45	<	130
1	6	X116+	X216+	X316+	X416+	Y116+	Y216+	Y316+	Y416+	Z116-	N16	=	0	N16	<	130
2	6	X126+	X226+	X326+	X426+	Y126+	Y226+	Y326+	Y426+	Z126-	N26	=	0	N26	<	130
3	6	X136+	X236+	X336+	X436+	Y136+	Y236+	Y336+	Y436+	Z136-	N36	=	0	N36	<	130
4	6	X146+	X246+	X346+	X446+	Y146+	Y246+	Y346+	Y446+	Z146-	N46	=	0	N46	<	130
1	7	X117+	X217+	X317+	X417+	Y117+	Y217+	Y317+	Y417+	Z117-	N17	=	0	N17	<	130
2	7	X127+	X227+	X327+	X427+	Y127+	Y227+	Y327+	Y427+	Z127-	N27	=	0	N27	<	130
3	7	X137+	X237+	X337+	X437+	Y137+	Y237+	Y337+	Y437+	Z137-	N37	=	0	N37	<	130
4	7	X147+	X247+	X347+	X447+	Y147+	Y247+	Y347+	Y447+	Z147-	N47	=	0	N47	<	130
1	8	X118+	X218+	X318+	X418+	Y118+	Y218+	Y318+	Y418+	Z118-	N18	=	0	N18	<	130
2	8	X128+	X228+	X328+	X428+	Y128+	Y228+	Y328+	Y428+	Z128-	N28	=	0	N28	<	130
3	8	X138+	X238+	X338+	X438+	Y138+	Y238+	Y338+	Y438+	Z138-	N38	=	0	N38	<	130
4	8	X148+	X248+	X348+	X448+	Y148+	Y248+	Y348+	Y448+	Z148-	N48	=	0	N48	<	130
1	9	X119+	X219+	X319+	X419+	Y119+	Y219+	Y319+	Y419+	Z119-	N19	=	0	N19	<	130
2	9	X129+	X229+	X329+	X429+	Y129+	Y229+	Y329+	Y429+	Z129-	N29	=	0	N29	<	130
3	9	X139+	X239+	X339+	X439+	Y139+	Y239+	Y339+	Y439+	Z139-	N39	=	0	N39	<	130
4	9	X149+	X249+	X349+	X449+	Y149+	Y249+	Y349+	Y449+	Z149-	N49	=	0	N49	<	130
1	10	X110+	X210+	X310+	X410+	Y110+	Y210+	Y310+	Y410+	Z110-	N10	=	0	N10	<	130
2	10	X1210+	X2210+	X3210+	X4210+	Y1210+	Y2210+	Y3210+	Y4210+	Z1210-	N210	=	0	N210	<	130
3	10	X1310+	X2310+	X3310+	X4310+	Y1310+	Y2310+	Y3310+	Y4310+	Z1310-	N310	=	0	N310	<	130
4	10	X1410+	X2410+	X3410+	X4410+	Y1410+	Y2410+	Y3410+	Y4410+	Z1410-	N410	=	0	N410	<	130
1	11	X1111+	X2111+	X3111+	X4111+	Y1111+	Y2111+	Y3111+	Y4111+	Z1111-	N111	=	0	N111	<	130
2	11	X1211+	X2211+	X3211+	X4211+	Y1211+	Y2211+	Y3211+	Y4211+	Z1211-	N211	=	0	N211	<	130
3	11	X1311+	X2311+	X3311+	X4311+	Y1311+	Y2311+	Y3311+	Y4311+	Z1311-	N311	=	0	N311	<	130
4	11	X1411+	X2411+	X3411+	X4411+	Y1411+	Y2411+	Y3411+	Y4411+	Z1411-	N411	=	0	N411	<	130
1	12	X1112+	X2112+	X3112+	X4112+	Y1112+	Y2112+	Y3112+	Y4112+	Z1112-	N112	=	0	N112	<	130
2	12	X1212+	X2212+	X3212+	X4212+	Y1212+	Y2212+	Y3212+	Y4212+	Z1212-	N212	=	0	N212	<	130
3	12	X1312+	X2312+	X3312+	X4312+	Y1312+	Y2312+	Y3312+	Y4312+	Z1312-	N312	=	0	N312	<	130
4	12	X1412+	X2412+	X3412+	X4412+	Y1412+	Y2412+	Y3412+	Y4412+	Z1412-	N412	=	0	N412	<	130
1	13	X1113+	X2113+	X3113+	X4113+	Y1113+	Y2113+	Y3113+	Y4113+	Z1113-	N113	=	0	N113	<	130
2	13	X1213+	X2213+	X3213+	X4213+	Y1213+	Y2213+	Y3213+	Y4213+	Z1213-	N213	=	0	N213	<	130
3	13	X1313+	X2313+	X3313+	X4313+	Y1313+	Y2313+	Y3313+	Y4313+	Z1313-	N313	=	0	N313	<	130
4	13	X1413+	X2413+	X3413+	X4413+	Y1413+	Y2413+	Y3413+	Y4413+	Z1413-	N413	=	0	N413	<	130
1	14	X1114+	X2114+	X3114+	X4114+	Y1114+	Y2114+	Y3114+	Y4114+	Z1114-	N114	=	0	N114	<	130
2	14	X1214+	X2214+	X3214+	X4214+	Y1214+	Y2214+	Y3214+	Y4214+	Z1214-	N214	=	0	N214	<	130
3	14	X1314+	X2314+	X3314+	X4314+	Y1314+	Y2314+	Y3314+	Y4314+	Z1314-	N314	=	0	N314	<	130
4	14	X1414+	X2414+	X3414+	X4414+	Y1414+	Y2414+	Y3414+	Y4414+	Z1414-	N414	=	0	N414	<	130
1	15	X1115+	X2115+	X3115+	X4115+	Y1115+	Y2115+	Y3115+	Y4115+	Z1115-	N115	=	0	N115	<	130
2	15	X1215+	X2215+	X3215+	X4215+	Y1215+	Y2215+	Y3215+	Y4215+	Z1215-	N215	=	0	N215	<	130
3	15	X1315+	X2315+	X3315+	X4315+	Y1315+	Y2315+	Y3315+	Y4315+	Z1315-	N315	=	0	N315	<	130
4	15	X1415+	X2415+	X3415+	X4415+	Y1415+	Y2415+	Y3415+	Y4415+	Z1415-	N415	=	0	N415	<	130
1	16	X1116+	X2116+	X3116+	X4116+	Y1116+	Y2116+	Y3116+	Y4116+	Z1116-	N116	=	0	N116	<	130
2	16	X1216+	X2216+	X3216+	X4216+	Y1216+	Y2216+	Y3216+	Y4216+	Z1216-	N216	=	0	N216	<	130
3	16	X1316+	X2316+	X3316+	X4316+	Y1316+	Y2316+	Y3316+	Y4316+	Z1316-	N316	=	0	N316	<	130
4	16	X1416+	X2416+	X3416+	X4416+	Y1416+	Y2416+	Y3416+	Y4416+	Z1416-	N416	=	0	N416	<	130
1	17	X1117+	X2117+	X3117+	X4117+	Y1117+	Y2117+	Y3117+	Y4117+	Z1117-	N117	=	0	N117	<	130
2	17	X1217+	X2217+	X3217+	X4217+	Y1217+	Y2217+	Y3217+	Y4217+	Z1217-	N217	=	0	N217	<	130
3	17	X1317+	X2317+	X3317+	X4317+	Y1317+	Y2317+	Y3317+	Y4317+	Z1317-	N317	=	0	N317	<	130
4	17	X1417+	X2417+	X3417+	X4417+	Y1417+	Y2417+	Y3417+	Y4417+	Z1417-	N417	=	0	N417	<	130
1	18	X1118+	X2118+	X3118+	X4118+	Y1118+	Y2118+	Y3118+	Y4118+	Z1118-	N118	=	0	N118	<	130
2	18	X1218+	X2218+	X3218+	X4218+	Y1218+	Y2218+	Y3218+	Y4218+	Z1218-	N218	=	0	N218	<	130
3	18	X1318+	X2318+	X3318+	X4318+	Y1318+	Y2318+	Y3318+	Y4318+	Z1318-	N318	=	0	N318	<	130
4	18	X1418+	X2418+	X3418+	X4418+	Y1418+	Y2418+	Y3418+	Y4418+	Z1418-	N418	=	0	N418	<	130
1	19	X1119+	X2119+	X3119+	X4119+	Y1119+	Y2119+	Y3119+	Y4119+	Z1119-	N119	=	0	N119	<	130
2	19	X1219+	X2219+	X3219+	X4219+	Y1219+	Y2219+	Y3219+	Y4219+	Z1219-	N219	=	0	N219	<	130
3	19	X1319+	X2319+	X3319+	X4319+	Y1319+	Y2319+	Y3319+	Y4319+	Z1319-	N319	=	0	N319	<	130
4	19	X1419+	X2419+	X3419+	X4419+	Y1419+	Y2419+	Y3419+	Y4419+	Z1419-	N419					

## RESTRICCIONES DE DISPONIBILIDAD PARA LOS INGREDIENTES DEL TIPO 1

Ingrediente	Día	Lote				Nota
		1	2	3	4	
1	1	X111 +	X121 +	X131 +	X141	< 60
2	1	X211 +	X221 +	X231 +	X241	< 24
3	1	X311 +	X321 +	X331 +	X341	< 1
4	1	X411 +	X421 +	X431 +	X441	< 70
1	2	X112 +	X122 +	X132 +	X142	< 60
2	2	X212 +	X222 +	X232 +	X242	< 24
3	2	X312 +	X322 +	X332 +	X342	< 1
4	2	X412 +	X422 +	X432 +	X442	< 70
1	3	X113 +	X123 +	X133 +	X143	< 60
2	3	X213 +	X223 +	X233 +	X243	< 24
3	3	X313 +	X323 +	X333 +	X343	< 1
4	3	X413 +	X423 +	X433 +	X443	< 70
1	4	X114 +	X124 +	X134 +	X144	< 60
2	4	X214 +	X224 +	X234 +	X244	< 24
3	4	X314 +	X324 +	X334 +	X344	< 1
4	4	X414 +	X424 +	X434 +	X444	< 70
1	5	X115 +	X125 +	X135 +	X145	< 60
2	5	X215 +	X225 +	X235 +	X245	< 24
3	5	X315 +	X325 +	X335 +	X345	< 1
4	5	X415 +	X425 +	X435 +	X445	< 70
1	6	X116 +	X126 +	X136 +	X146	< 60
2	6	X216 +	X226 +	X236 +	X246	< 24
3	6	X316 +	X326 +	X336 +	X346	< 1
4	6	X416 +	X426 +	X436 +	X446	< 70
1	7	X117 +	X127 +	X137 +	X147	< 60
2	7	X217 +	X227 +	X237 +	X247	< 24
3	7	X317 +	X327 +	X337 +	X347	< 1
4	7	X417 +	X427 +	X437 +	X447	< 70
1	8	X118 +	X128 +	X138 +	X148	< 60
2	8	X218 +	X228 +	X238 +	X248	< 24
3	8	X318 +	X328 +	X338 +	X348	< 1
4	8	X418 +	X428 +	X438 +	X448	< 70
1	9	X119 +	X129 +	X139 +	X149	< 60
2	9	X219 +	X229 +	X239 +	X249	< 24
3	9	X319 +	X329 +	X339 +	X349	< 1
4	9	X419 +	X429 +	X439 +	X449	< 70
1	10	X110 +	X120 +	X130 +	X140	< 60
2	10	X210 +	X220 +	X230 +	X240	< 24
3	10	X310 +	X320 +	X330 +	X340	< 1
4	10	X410 +	X420 +	X430 +	X440	< 70
1	11	X111 +	X121 +	X131 +	X141	< 60
2	11	X211 +	X221 +	X231 +	X241	< 24
3	11	X311 +	X321 +	X331 +	X341	< 1
4	11	X411 +	X421 +	X431 +	X441	< 70
1	12	X112 +	X122 +	X132 +	X142	< 60
2	12	X212 +	X222 +	X232 +	X242	< 24
3	12	X312 +	X322 +	X332 +	X342	< 1
4	12	X412 +	X422 +	X432 +	X442	< 70
1	13	X113 +	X123 +	X133 +	X143	< 60
2	13	X213 +	X223 +	X233 +	X243	< 24
3	13	X313 +	X323 +	X333 +	X343	< 1
4	13	X413 +	X423 +	X433 +	X443	< 70
1	14	X114 +	X124 +	X134 +	X144	< 60
2	14	X214 +	X224 +	X234 +	X244	< 24
3	14	X314 +	X324 +	X334 +	X344	< 1
4	14	X414 +	X424 +	X434 +	X444	< 70
1	15	X115 +	X125 +	X135 +	X145	< 60
2	15	X215 +	X225 +	X235 +	X245	< 24
3	15	X315 +	X325 +	X335 +	X345	< 1
4	15	X415 +	X425 +	X435 +	X445	< 70
1	16	X116 +	X126 +	X136 +	X146	< 60
2	16	X216 +	X226 +	X236 +	X246	< 24
3	16	X316 +	X326 +	X336 +	X346	< 1
4	16	X416 +	X426 +	X436 +	X446	< 70
1	17	X117 +	X127 +	X137 +	X147	< 60
2	17	X217 +	X227 +	X237 +	X247	< 24
3	17	X317 +	X327 +	X337 +	X347	< 1
4	17	X417 +	X427 +	X437 +	X447	< 70
1	18	X118 +	X128 +	X138 +	X148	< 60
2	18	X218 +	X228 +	X238 +	X248	< 24
3	18	X318 +	X328 +	X338 +	X348	< 1
4	18	X418 +	X428 +	X438 +	X448	< 70
1	19	X119 +	X129 +	X139 +	X149	< 60
2	19	X219 +	X229 +	X239 +	X249	< 24
3	19	X319 +	X329 +	X339 +	X349	< 1
4	19	X419 +	X429 +	X439 +	X449	< 70
1	20	X120 +	X120 +	X130 +	X140	< 60
2	20	X220 +	X220 +	X230 +	X240	< 24
3	20	X320 +	X320 +	X330 +	X340	< 1
4	20	X420 +	X420 +	X430 +	X440	< 70
1	21	X121 +	X121 +	X131 +	X141	< 60
2	21	X221 +	X221 +	X231 +	X241	< 24
3	21	X321 +	X321 +	X331 +	X341	< 1
4	21	X421 +	X421 +	X431 +	X441	< 70
1	22	X122 +	X122 +	X132 +	X142	< 60
2	22	X222 +	X222 +	X232 +	X242	< 24
3	22	X322 +	X322 +	X332 +	X342	< 1
4	22	X422 +	X422 +	X432 +	X442	< 70
1	23	X123 +	X123 +	X133 +	X143	< 60
2	23	X223 +	X223 +	X233 +	X243	< 24
3	23	X323 +	X323 +	X333 +	X343	< 1
4	23	X423 +	X423 +	X433 +	X443	< 70
1	24	X124 +	X124 +	X134 +	X144	< 60
2	24	X224 +	X224 +	X234 +	X244	< 24
3	24	X324 +	X324 +	X334 +	X344	< 1
4	24	X424 +	X424 +	X434 +	X444	< 70
1	25	X125 +	X125 +	X135 +	X145	< 60
2	25	X225 +	X225 +	X235 +	X245	< 24
3	25	X325 +	X325 +	X335 +	X345	< 1
4	25	X425 +	X425 +	X435 +	X445	< 70
1	26	X126 +	X126 +	X136 +	X146	< 60
2	26	X226 +	X226 +	X236 +	X246	< 24
3	26	X326 +	X326 +	X336 +	X346	< 1
4	26	X426 +	X426 +	X436 +	X446	< 70
1	27	X127 +	X127 +	X137 +	X147	< 60
2	27	X227 +	X227 +	X237 +	X247	< 24
3	27	X327 +	X327 +	X337 +	X347	< 1
4	27	X427 +	X427 +	X437 +	X447	< 70
1	28	X128 +	X128 +	X138 +	X148	< 60
2	28	X228 +	X228 +	X238 +	X248	< 24
3	28	X328 +	X328 +	X338 +	X348	< 1
4	28	X428 +	X428 +	X438 +	X448	< 70
1	29	X129 +	X129 +	X139 +	X149	< 60
2	29	X229 +	X229 +	X239 +	X249	< 24
3	29	X329 +	X329 +	X339 +	X349	< 1
4	29	X429 +	X429 +	X439 +	X449	< 70
1	30	X130 +	X130 +	X130 +	X140	< 60
2	30	X230 +	X230 +	X230 +	X240	< 24
3	30	X330 +	X330 +	X330 +	X340	< 1
4	30	X430 +	X430 +	X430 +	X440	< 70

## RESTRICCIONES DE DISPONIBILIDAD PARA LOS INGREDIENTES DEL TIPO 2

Ingrediente	Día	Lote				Nota
		1	2	3	4	
1	1	Y111 +	Y121 +	Y131 +	Y141 <	428
2	1	Y211 +	Y221 +	Y231 +	Y241 <	32
3	1	Y311 +	Y321 +	Y331 +	Y341 <	31
4	1	Y411 +	Y421 +	Y431 +	Y441 <	142
1	2	Y112 +	Y122 +	Y132 +	Y142 <	428
2	2	Y212 +	Y222 +	Y232 +	Y242 <	32
3	2	Y312 +	Y322 +	Y332 +	Y342 <	31
4	2	Y412 +	Y422 +	Y432 +	Y442 <	142
1	3	Y113 +	Y123 +	Y133 +	Y143 <	428
2	3	Y213 +	Y223 +	Y233 +	Y243 <	32
3	3	Y313 +	Y323 +	Y333 +	Y343 <	31
4	3	Y413 +	Y423 +	Y433 +	Y443 <	142
1	4	Y114 +	Y124 +	Y134 +	Y144 <	428
2	4	Y214 +	Y224 +	Y234 +	Y244 <	32
3	4	Y314 +	Y324 +	Y334 +	Y344 <	31
4	4	Y414 +	Y424 +	Y434 +	Y444 <	142
1	5	Y115 +	Y125 +	Y135 +	Y145 <	428
2	5	Y215 +	Y225 +	Y235 +	Y245 <	32
3	5	Y315 +	Y325 +	Y335 +	Y345 <	31
4	5	Y415 +	Y425 +	Y435 +	Y445 <	142
1	6	Y116 +	Y126 +	Y136 +	Y146 <	428
2	6	Y216 +	Y226 +	Y236 +	Y246 <	32
3	6	Y316 +	Y326 +	Y336 +	Y346 <	31
4	6	Y416 +	Y426 +	Y436 +	Y446 <	142
1	7	Y117 +	Y127 +	Y137 +	Y147 <	428
2	7	Y217 +	Y227 +	Y237 +	Y247 <	32
3	7	Y317 +	Y327 +	Y337 +	Y347 <	31
4	7	Y417 +	Y427 +	Y437 +	Y447 <	142
1	8	Y118 +	Y128 +	Y138 +	Y148 <	428
2	8	Y218 +	Y228 +	Y238 +	Y248 <	32
3	8	Y318 +	Y328 +	Y338 +	Y348 <	31
4	8	Y418 +	Y428 +	Y438 +	Y448 <	142
1	9	Y119 +	Y129 +	Y139 +	Y149 <	428
2	9	Y219 +	Y229 +	Y239 +	Y249 <	32
3	9	Y319 +	Y329 +	Y339 +	Y349 <	31
4	9	Y419 +	Y429 +	Y439 +	Y449 <	142
1	10	Y110 +	Y120 +	Y130 +	Y140 <	428
2	10	Y210 +	Y220 +	Y230 +	Y240 <	32
3	10	Y310 +	Y320 +	Y330 +	Y340 <	31
4	10	Y410 +	Y420 +	Y430 +	Y440 <	142
1	11	Y111 +	Y121 +	Y131 +	Y1411 <	428
2	11	Y211 +	Y221 +	Y231 +	Y2411 <	32
3	11	Y311 +	Y321 +	Y331 +	Y3411 <	31
4	11	Y411 +	Y421 +	Y431 +	Y4411 <	142
1	12	Y112 +	Y122 +	Y132 +	Y1412 <	428
2	12	Y212 +	Y222 +	Y232 +	Y2412 <	32
3	12	Y312 +	Y322 +	Y332 +	Y3412 <	31
4	12	Y412 +	Y422 +	Y432 +	Y4412 <	142
1	13	Y113 +	Y123 +	Y133 +	Y1413 <	428
2	13	Y213 +	Y223 +	Y233 +	Y2413 <	32
3	13	Y313 +	Y323 +	Y333 +	Y3413 <	31
4	13	Y413 +	Y423 +	Y433 +	Y4413 <	142
1	14	Y114 +	Y124 +	Y134 +	Y1414 <	428
2	14	Y214 +	Y224 +	Y234 +	Y2414 <	32
3	14	Y314 +	Y324 +	Y334 +	Y3414 <	31
4	14	Y414 +	Y424 +	Y434 +	Y4414 <	142
1	15	Y115 +	Y125 +	Y135 +	Y1415 <	428
2	15	Y215 +	Y225 +	Y235 +	Y2415 <	32
3	15	Y315 +	Y325 +	Y335 +	Y3415 <	31
4	15	Y415 +	Y425 +	Y435 +	Y4415 <	142
1	16	Y116 +	Y126 +	Y136 +	Y1416 <	428
2	16	Y216 +	Y226 +	Y236 +	Y2416 <	32
3	16	Y316 +	Y326 +	Y336 +	Y3416 <	31
4	16	Y416 +	Y426 +	Y436 +	Y4416 <	142
1	17	Y117 +	Y127 +	Y137 +	Y1417 <	428
2	17	Y217 +	Y227 +	Y237 +	Y2417 <	32
3	17	Y317 +	Y327 +	Y337 +	Y3417 <	31
4	17	Y417 +	Y427 +	Y437 +	Y4417 <	142
1	18	Y118 +	Y128 +	Y138 +	Y1418 <	428
2	18	Y218 +	Y228 +	Y238 +	Y2418 <	32
3	18	Y318 +	Y328 +	Y338 +	Y3418 <	31
4	18	Y418 +	Y428 +	Y438 +	Y4418 <	142
1	19	Y119 +	Y129 +	Y139 +	Y1419 <	428
2	19	Y219 +	Y229 +	Y239 +	Y2419 <	32
3	19	Y319 +	Y329 +	Y339 +	Y3419 <	31
4	19	Y419 +	Y429 +	Y439 +	Y4419 <	142
1	20	Y120 +	Y120 +	Y130 +	Y1420 <	428
2	20	Y220 +	Y220 +	Y230 +	Y2420 <	32
3	20	Y320 +	Y320 +	Y330 +	Y3420 <	31
4	20	Y420 +	Y420 +	Y430 +	Y4420 <	142
1	21	Y121 +	Y121 +	Y131 +	Y1421 <	428
2	21	Y221 +	Y221 +	Y231 +	Y2421 <	32
3	21	Y321 +	Y321 +	Y331 +	Y3421 <	31
4	21	Y421 +	Y421 +	Y431 +	Y4421 <	142
1	22	Y122 +	Y122 +	Y132 +	Y1422 <	428
2	22	Y222 +	Y222 +	Y232 +	Y2422 <	32
3	22	Y322 +	Y322 +	Y332 +	Y3422 <	31
4	22	Y422 +	Y422 +	Y432 +	Y4422 <	142
1	23	Y123 +	Y123 +	Y133 +	Y1423 <	428
2	23	Y223 +	Y223 +	Y233 +	Y2423 <	32
3	23	Y323 +	Y323 +	Y333 +	Y3423 <	31
4	23	Y423 +	Y423 +	Y433 +	Y4423 <	142
1	24	Y124 +	Y124 +	Y134 +	Y1424 <	428
2	24	Y224 +	Y224 +	Y234 +	Y2424 <	32
3	24	Y324 +	Y324 +	Y334 +	Y3424 <	31
4	24	Y424 +	Y424 +	Y434 +	Y4424 <	142
1	25	Y125 +	Y125 +	Y135 +	Y1425 <	428
2	25	Y225 +	Y225 +	Y235 +	Y2425 <	32
3	25	Y325 +	Y325 +	Y335 +	Y3425 <	31
4	25	Y425 +	Y425 +	Y435 +	Y4425 <	142
1	26	Y126 +	Y126 +	Y136 +	Y1426 <	428
2	26	Y226 +	Y226 +	Y236 +	Y2426 <	32
3	26	Y326 +	Y326 +	Y336 +	Y3426 <	31
4	26	Y426 +	Y426 +	Y436 +	Y4426 <	142
1	27	Y127 +	Y127 +	Y137 +	Y1427 <	428
2	27	Y227 +	Y227 +	Y237 +	Y2427 <	32
3	27	Y327 +	Y327 +	Y337 +	Y3427 <	31
4	27	Y427 +	Y427 +	Y437 +	Y4427 <	142
1	28	Y128 +	Y128 +	Y138 +	Y1428 <	428
2	28	Y228 +	Y228 +	Y238 +	Y2428 <	32
3	28	Y328 +	Y328 +	Y338 +	Y3428 <	31
4	28	Y428 +	Y428 +	Y438 +	Y4428 <	142
1	29	Y129 +	Y129 +	Y139 +	Y1429 <	428
2	29	Y229 +	Y229 +	Y239 +	Y2429 <	32
3	29	Y329 +	Y329 +	Y339 +	Y3429 <	31
4	29	Y429 +	Y429 +	Y439 +	Y4429 <	142
1	30	Y130 +	Y130 +	Y130 +	Y1430 <	428
2	30	Y230 +	Y230 +	Y230 +	Y2430 <	32
3	30	Y330 +	Y330 +	Y330 +	Y3430 <	31
4	30	Y430 +	Y430 +	Y430 +	Y4430 <	142

428

32

31

31

31

31

31

31

31

31

31

31

31

31

31

31

31

31

31

31

31

31

31

31

31

31

31

31

31

31

31

31

31

31

31

31

31

31

31

31

31

31

31

31

31

31

31

31

31

31

31

31

31

31

31

31

31

31

31

31

31

31

31

31

31

31

31

31

31

31

31

31

31

31

31

31

31

31

31

31

31

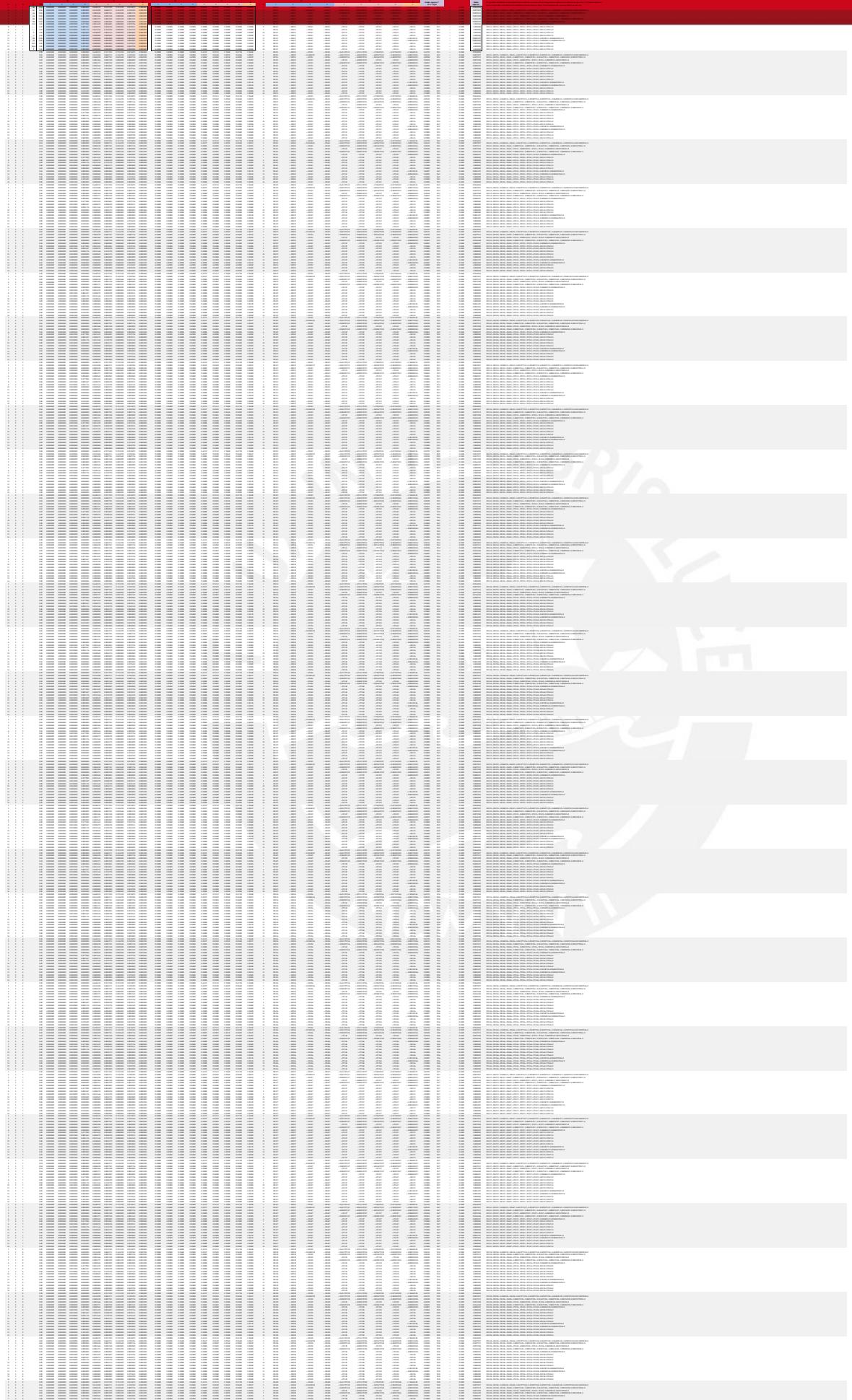
31

31

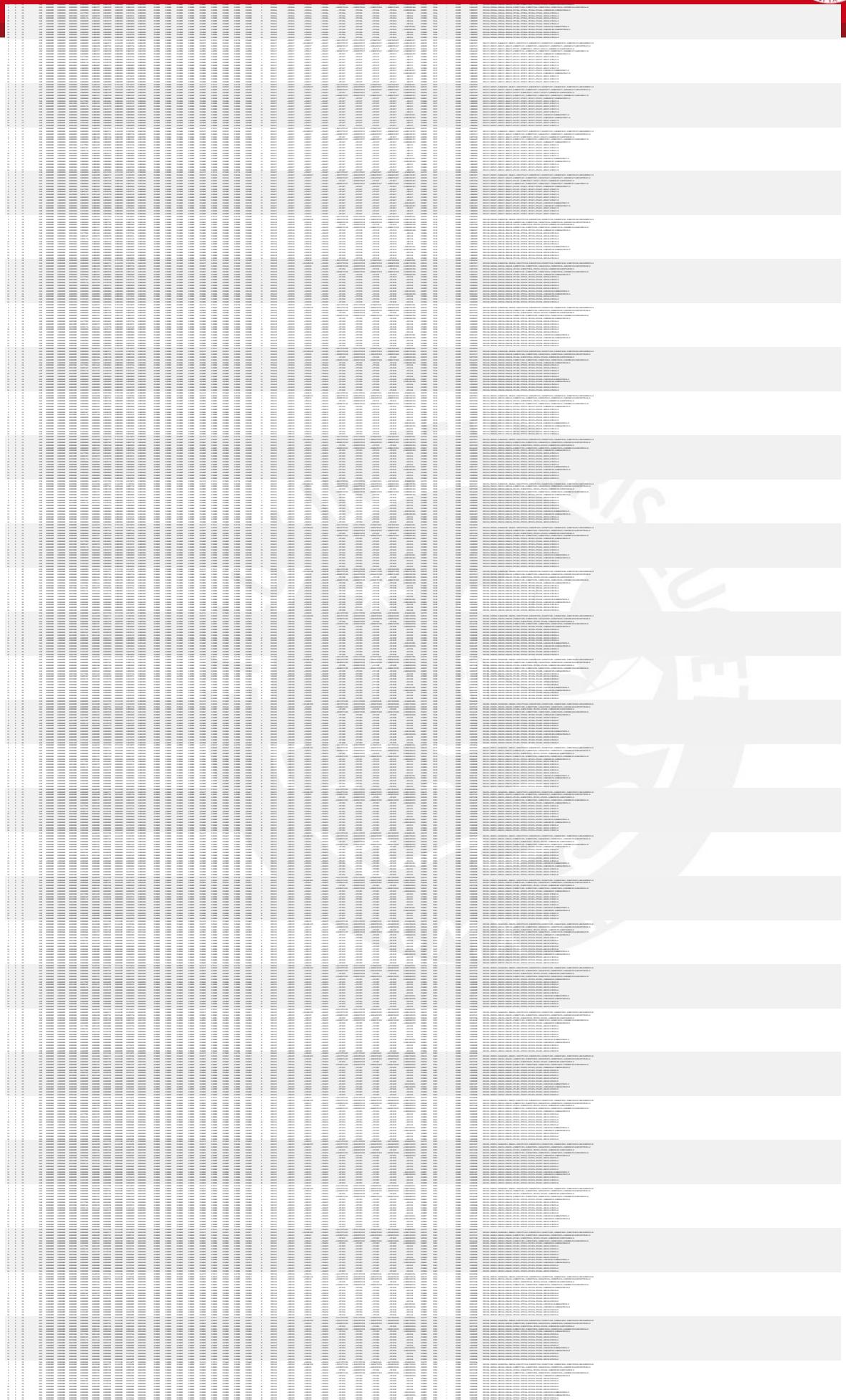
31

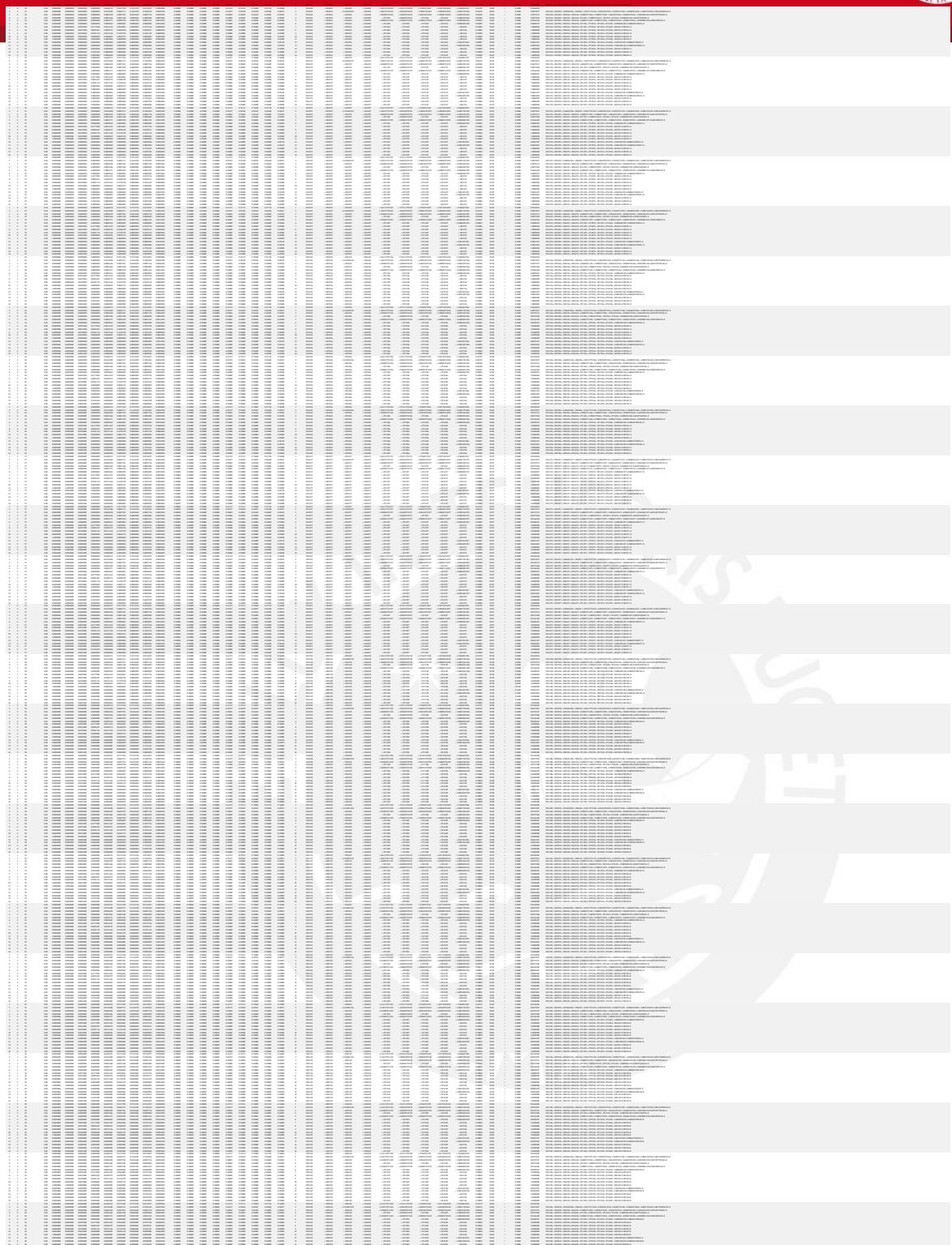
31

RESTRICCIÓN DE BAGAJE QUÍMICO PARA EL COMPLEMENTO DE LÍMITES AL MÁS ALTO

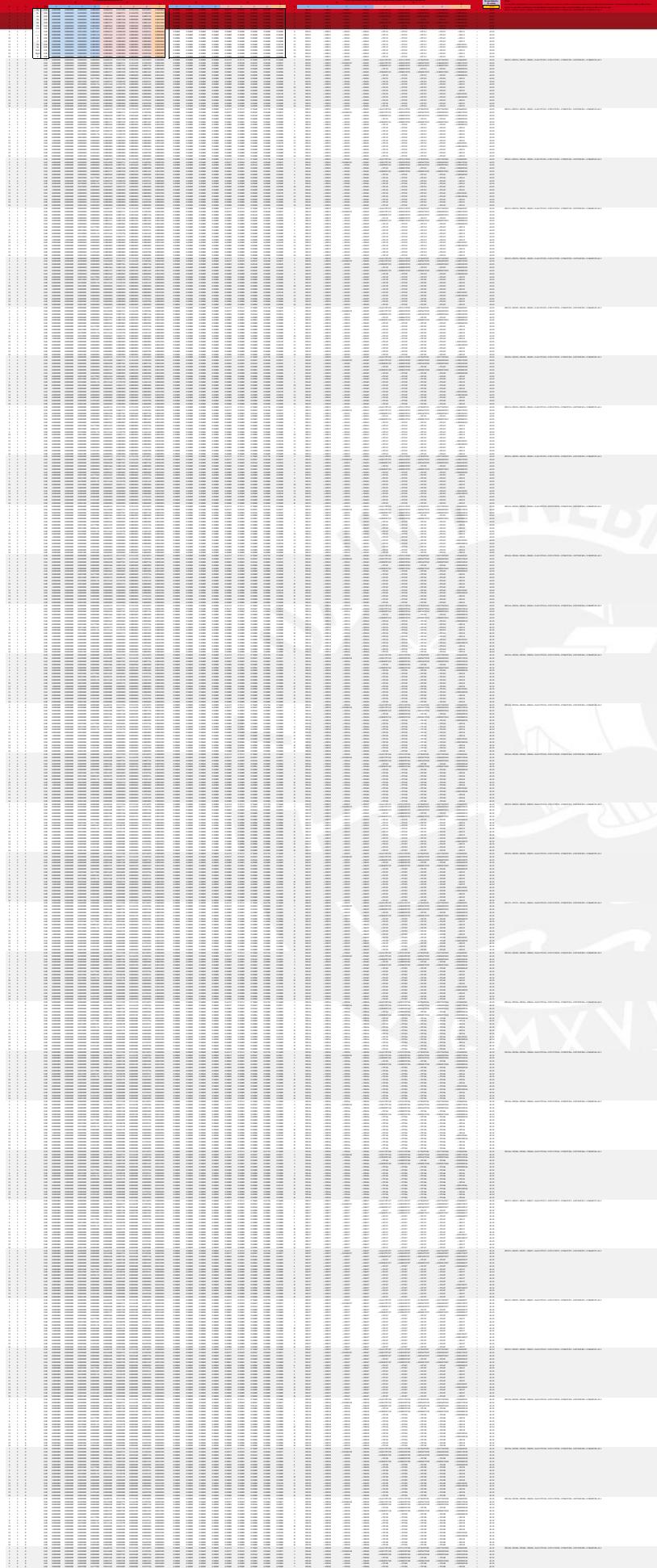


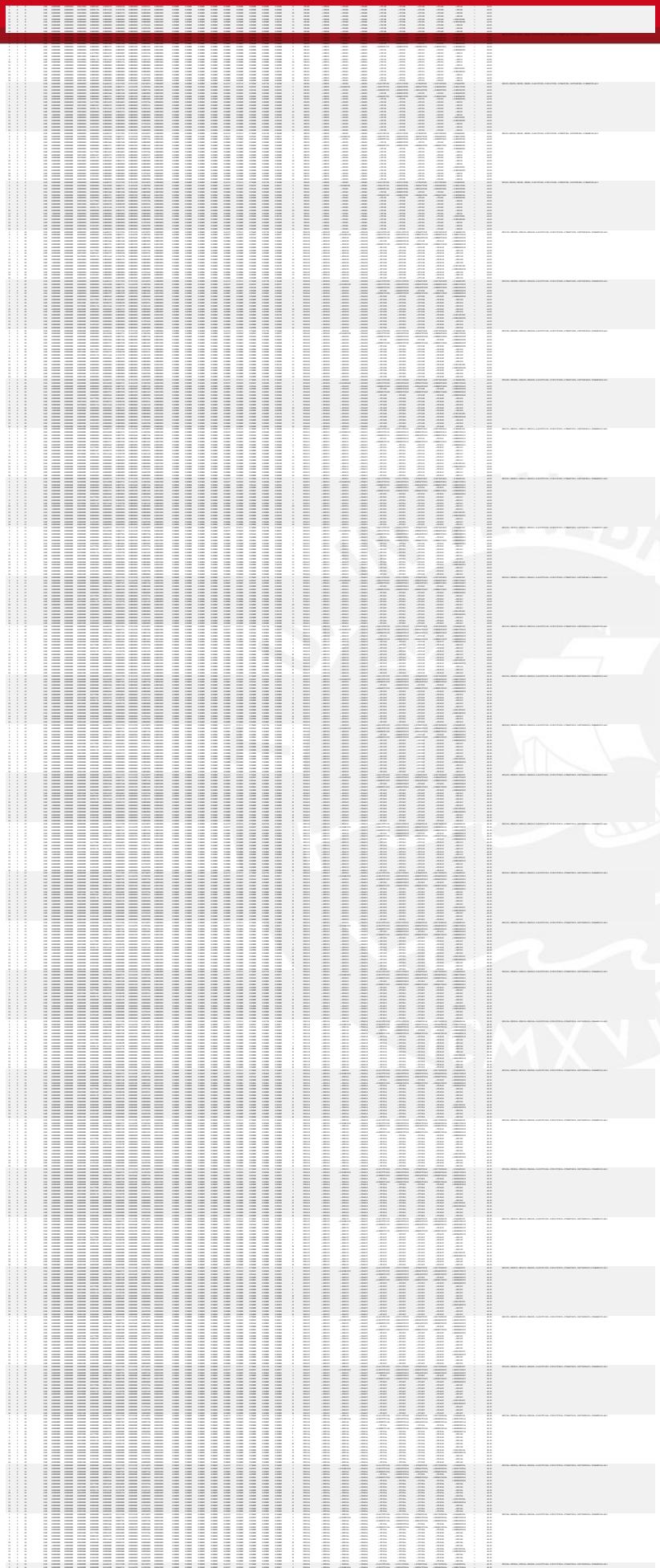


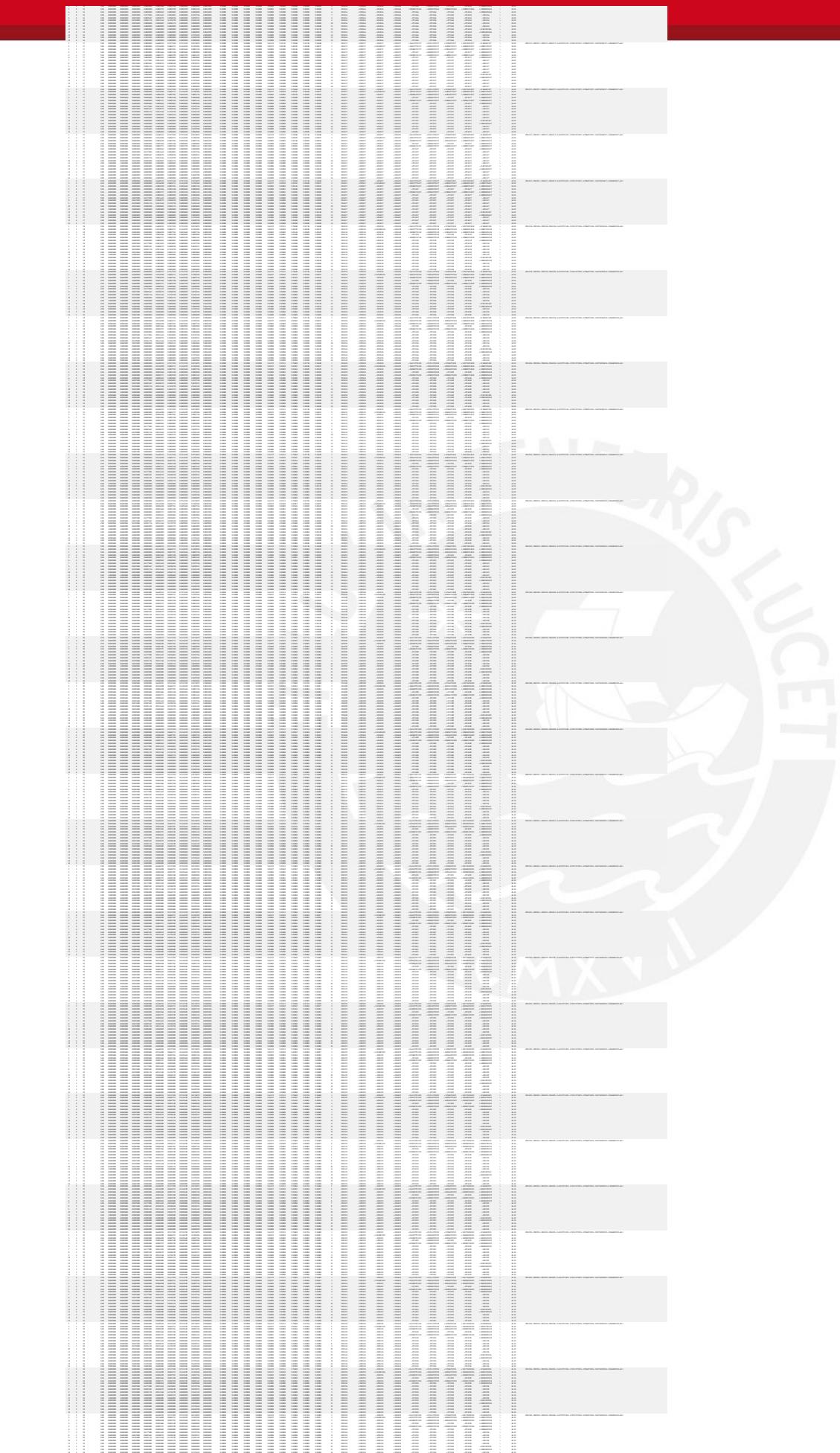


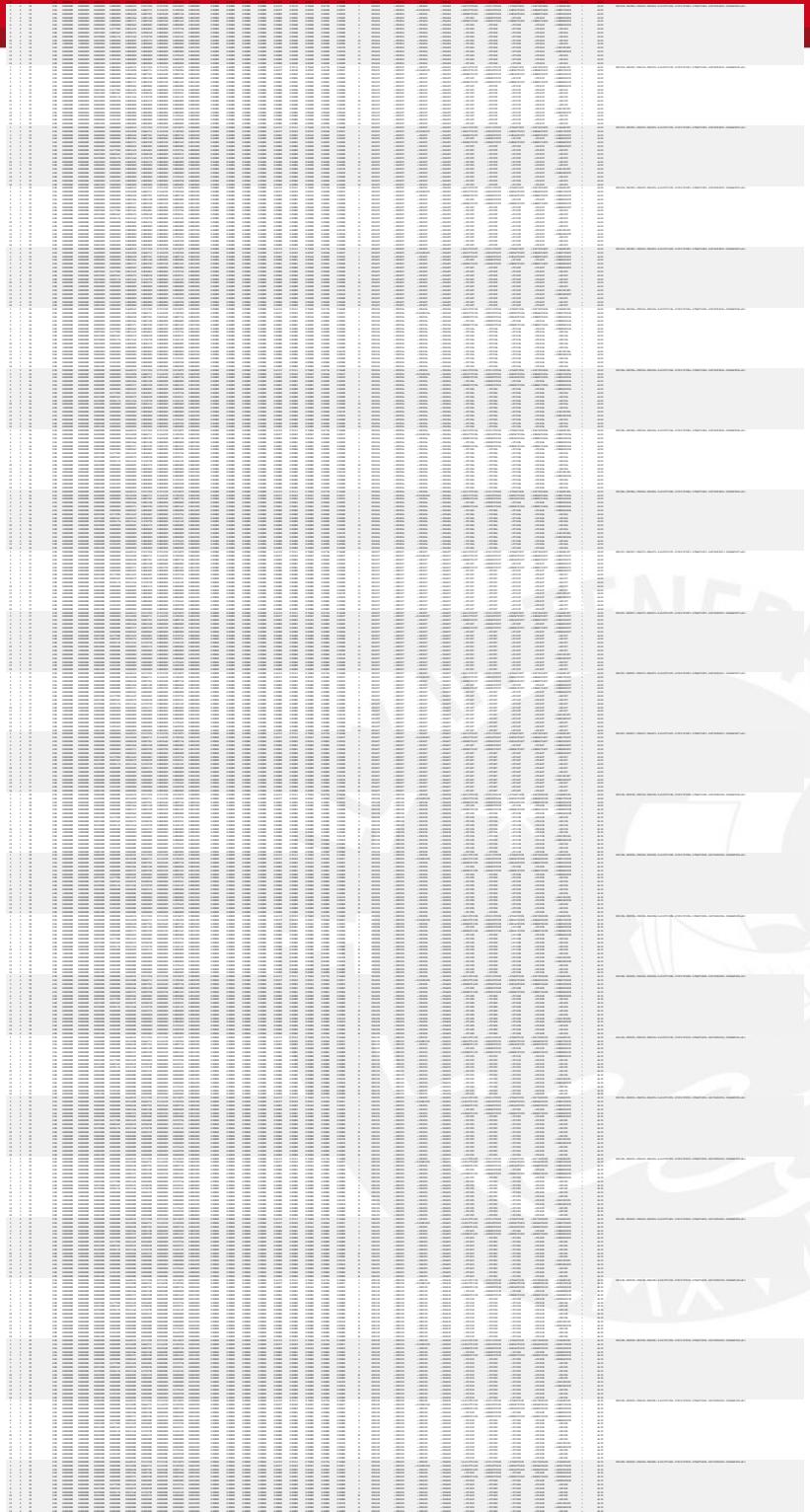


RESTRICCIÓN DE BÁSICO QUÍMICO PARA EL COMPLEMENTO DE LÍMITES AL ÁREA INTERIOR









## RESTRICCIONES PARA EL EMPLEO DE LOS INGREDIENTES DEL TIPO 1 (Hj,k)

Lote	Día	Y		Z	
		1	2	1	
1	1	Y111 +	Y211 +	Z111 -	H11 = 0
2	1	Y121 +	Y221 +	Z121 -	H21 = 0
3	1	Y131 +	Y231 +	Z131 -	H31 = 0
4	1	Y141 +	Y241 +	Z141 -	H41 = 0
1	2	Y112 +	Y212 +	Z112 -	H12 = 0
2	2	Y122 +	Y222 +	Z122 -	H22 = 0
3	2	Y132 +	Y232 +	Z132 -	H32 = 0
4	2	Y142 +	Y242 +	Z142 -	H42 = 0
1	3	Y113 +	Y213 +	Z113 -	H13 = 0
2	3	Y123 +	Y223 +	Z123 -	H23 = 0
3	3	Y133 +	Y233 +	Z133 -	H33 = 0
4	3	Y143 +	Y243 +	Z143 -	H43 = 0
1	4	Y114 +	Y214 +	Z114 -	H14 = 0
2	4	Y124 +	Y224 +	Z124 -	H24 = 0
3	4	Y134 +	Y234 +	Z134 -	H34 = 0
4	4	Y144 +	Y244 +	Z144 -	H44 = 0
1	5	Y115 +	Y215 +	Z115 -	H15 = 0
2	5	Y125 +	Y225 +	Z125 -	H25 = 0
3	5	Y135 +	Y235 +	Z135 -	H35 = 0
4	5	Y145 +	Y245 +	Z145 -	H45 = 0
1	6	Y116 +	Y216 +	Z116 -	H16 = 0
2	6	Y126 +	Y226 +	Z126 -	H26 = 0
3	6	Y136 +	Y236 +	Z136 -	H36 = 0
4	6	Y146 +	Y246 +	Z146 -	H46 = 0
1	7	Y117 +	Y217 +	Z117 -	H17 = 0
2	7	Y127 +	Y227 +	Z127 -	H27 = 0
3	7	Y137 +	Y237 +	Z137 -	H37 = 0
4	7	Y147 +	Y247 +	Z147 -	H47 = 0
1	8	Y118 +	Y218 +	Z118 -	H18 = 0
2	8	Y128 +	Y228 +	Z128 -	H28 = 0
3	8	Y138 +	Y238 +	Z138 -	H38 = 0
4	8	Y148 +	Y248 +	Z148 -	H48 = 0
1	9	Y119 +	Y219 +	Z119 -	H19 = 0
2	9	Y129 +	Y229 +	Z129 -	H29 = 0
3	9	Y139 +	Y239 +	Z139 -	H39 = 0
4	9	Y149 +	Y249 +	Z149 -	H49 = 0
1	10	Y110 +	Y210 +	Z110 -	H10 = 0
2	10	Y120 +	Y220 +	Z120 -	H20 = 0
3	10	Y130 +	Y230 +	Z130 -	H30 = 0
4	10	Y140 +	Y240 +	Z140 -	H40 = 0
1	11	Y111 +	Y211 +	Z111 -	H11 = 0
2	11	Y121 +	Y221 +	Z121 -	H21 = 0
3	11	Y131 +	Y231 +	Z131 -	H31 = 0
4	11	Y141 +	Y241 +	Z141 -	H41 = 0
1	12	Y112 +	Y212 +	Z112 -	H12 = 0
2	12	Y122 +	Y222 +	Z122 -	H22 = 0
3	12	Y132 +	Y232 +	Z132 -	H32 = 0
4	12	Y142 +	Y242 +	Z142 -	H42 = 0
1	13	Y113 +	Y213 +	Z113 -	H13 = 0
2	13	Y123 +	Y223 +	Z123 -	H23 = 0
3	13	Y133 +	Y233 +	Z133 -	H33 = 0
4	13	Y143 +	Y243 +	Z143 -	H43 = 0
1	14	Y114 +	Y214 +	Z114 -	H14 = 0
2	14	Y124 +	Y224 +	Z124 -	H24 = 0
3	14	Y134 +	Y234 +	Z134 -	H34 = 0
4	14	Y144 +	Y244 +	Z144 -	H44 = 0
1	15	Y115 +	Y215 +	Z115 -	H15 = 0
2	15	Y125 +	Y225 +	Z125 -	H25 = 0
3	15	Y135 +	Y235 +	Z135 -	H35 = 0
4	15	Y145 +	Y245 +	Z145 -	H45 = 0
1	16	Y116 +	Y216 +	Z116 -	H16 = 0
2	16	Y126 +	Y226 +	Z126 -	H26 = 0
3	16	Y136 +	Y236 +	Z136 -	H36 = 0
4	16	Y146 +	Y246 +	Z146 -	H46 = 0
1	17	Y117 +	Y217 +	Z117 -	H17 = 0
2	17	Y127 +	Y227 +	Z127 -	H27 = 0
3	17	Y137 +	Y237 +	Z137 -	H37 = 0
4	17	Y147 +	Y247 +	Z147 -	H47 = 0
1	18	Y118 +	Y218 +	Z118 -	H18 = 0
2	18	Y128 +	Y228 +	Z128 -	H28 = 0
3	18	Y138 +	Y238 +	Z138 -	H38 = 0
4	18	Y148 +	Y248 +	Z148 -	H48 = 0
1	19	Y119 +	Y219 +	Z119 -	H19 = 0
2	19	Y129 +	Y229 +	Z129 -	H29 = 0
3	19	Y139 +	Y239 +	Z139 -	H39 = 0
4	19	Y149 +	Y249 +	Z149 -	H49 = 0
1	20	Y120 +	Y220 +	Z120 -	H20 = 0
2	20	Y1220 +	Y2220 +	Z1220 -	H220 = 0
3	20	Y1320 +	Y2320 +	Z1320 -	H320 = 0
4	20	Y1420 +	Y2420 +	Z1420 -	H420 = 0
1	21	Y121 +	Y221 +	Z121 -	H21 = 0
2	21	Y1221 +	Y2221 +	Z1221 -	H221 = 0
3	21	Y1321 +	Y2321 +	Z1321 -	H321 = 0
4	21	Y1421 +	Y2421 +	Z1421 -	H421 = 0
1	22	Y122 +	Y222 +	Z122 -	H22 = 0
2	22	Y1222 +	Y2222 +	Z1222 -	H222 = 0
3	22	Y1322 +	Y2322 +	Z1322 -	H322 = 0
4	22	Y1422 +	Y2422 +	Z1422 -	H422 = 0
1	23	Y123 +	Y223 +	Z123 -	H23 = 0
2	23	Y1223 +	Y2223 +	Z1223 -	H223 = 0
3	23	Y1323 +	Y2323 +	Z1323 -	H323 = 0
4	23	Y1423 +	Y2423 +	Z1423 -	H423 = 0
1	24	Y124 +	Y224 +	Z124 -	H24 = 0
2	24	Y1224 +	Y2224 +	Z1224 -	H224 = 0
3	24	Y1324 +	Y2324 +	Z1324 -	H324 = 0
4	24	Y1424 +	Y2424 +	Z1424 -	H424 = 0
1	25	Y125 +	Y225 +	Z125 -	H25 = 0
2	25	Y1225 +	Y2225 +	Z1225 -	H225 = 0
3	25	Y1325 +	Y2325 +	Z1325 -	H325 = 0
4	25	Y1425 +	Y2425 +	Z1425 -	H425 = 0
1	26	Y126 +	Y226 +	Z126 -	H26 = 0
2	26	Y1226 +	Y2226 +	Z1226 -	H226 = 0
3	26	Y1326 +	Y2326 +	Z1326 -	H326 = 0
4	26	Y1426 +	Y2426 +	Z1426 -	H426 = 0
1	27	Y127 +	Y227 +	Z127 -	H27 = 0
2	27	Y1227 +	Y2227 +	Z1227 -	H227 = 0
3	27	Y1327 +	Y2327 +	Z1327 -	H327 = 0
4	27	Y1427 +	Y2427 +	Z1427 -	H427 = 0
1	28	Y128 +	Y228 +	Z128 -	H28 = 0
2	28	Y1228 +	Y2228 +	Z1228 -	H228 = 0
3	28	Y1328 +	Y2328 +	Z1328 -	H328 = 0
4	28	Y1428 +	Y2428 +	Z1428 -	H428 = 0
1	29	Y129 +	Y229 +	Z129 -	H29 = 0
2	29	Y1229 +	Y2229 +	Z1229 -	H229 = 0
3	29	Y1329 +	Y2329 +	Z1329 -	H329 = 0
4	29	Y1429 +	Y2429 +	Z1429 -	H429 = 0
1	30	Y130 +	Y230 +	Z130 -	H30 = 0
2	30	Y1230 +	Y2230 +	Z1230 -	H230 = 0
3	30	Y1330 +	Y2330 +	Z1330 -	H330 = 0
4	30	Y1430 +	Y2430 +	Z1430 -	H430 = 0

## RESTRICCIONES PARA EL EMPLEO DE LOS INGREDIENTES DEL TIPO 1 (para X1,j,k y X2,j,k)

Lote	Día	X	r1	r2
1	1	X111 -0.1357H11 > 0	X211 -0.05H11 > 0	
2	1	X121 -0.1357H21 > 0	X221 -0.05H21 > 0	
3	1	X131 -0.1357H31 > 0	X231 -0.05H31 > 0	
4	1	X141 -0.1357H41 > 0	X241 -0.05H41 > 0	
1	2	X112 -0.1357H12 > 0	X212 -0.05H12 > 0	
2	2	X122 -0.1357H22 > 0	X222 -0.05H22 > 0	
3	2	X132 -0.1357H32 > 0	X232 -0.05H32 > 0	
4	2	X142 -0.1357H42 > 0	X242 -0.05H42 > 0	
1	3	X113 -0.1357H13 > 0	X213 -0.05H13 > 0	
2	3	X123 -0.1357H23 > 0	X223 -0.05H23 > 0	
3	3	X133 -0.1357H33 > 0	X233 -0.05H33 > 0	
4	3	X143 -0.1357H43 > 0	X243 -0.05H43 > 0	
1	4	X114 -0.1357H14 > 0	X214 -0.05H14 > 0	
2	4	X124 -0.1357H24 > 0	X224 -0.05H24 > 0	
3	4	X134 -0.1357H34 > 0	X234 -0.05H34 > 0	
4	4	X144 -0.1357H44 > 0	X244 -0.05H44 > 0	
1	5	X115 -0.1357H15 > 0	X215 -0.05H15 > 0	
2	5	X125 -0.1357H25 > 0	X225 -0.05H25 > 0	
3	5	X135 -0.1357H35 > 0	X235 -0.05H35 > 0	
4	5	X145 -0.1357H45 > 0	X245 -0.05H45 > 0	
1	6	X116 -0.1357H16 > 0	X216 -0.05H16 > 0	
2	6	X126 -0.1357H26 > 0	X226 -0.05H26 > 0	
3	6	X136 -0.1357H36 > 0	X236 -0.05H36 > 0	
4	6	X146 -0.1357H46 > 0	X246 -0.05H46 > 0	
1	7	X117 -0.1357H17 > 0	X217 -0.05H17 > 0	
2	7	X127 -0.1357H27 > 0	X227 -0.05H27 > 0	
3	7	X137 -0.1357H37 > 0	X237 -0.05H37 > 0	
4	7	X147 -0.1357H47 > 0	X247 -0.05H47 > 0	
1	8	X118 -0.1357H18 > 0	X218 -0.05H18 > 0	
2	8	X128 -0.1357H28 > 0	X228 -0.05H28 > 0	
3	8	X138 -0.1357H38 > 0	X238 -0.05H38 > 0	
4	8	X148 -0.1357H48 > 0	X248 -0.05H48 > 0	
1	9	X119 -0.1357H19 > 0	X219 -0.05H19 > 0	
2	9	X129 -0.1357H29 > 0	X229 -0.05H29 > 0	
3	9	X139 -0.1357H39 > 0	X239 -0.05H39 > 0	
4	9	X149 -0.1357H49 > 0	X249 -0.05H49 > 0	
1	10	X110 -0.1357H10 > 0	X210 -0.05H10 > 0	
2	10	X1210 -0.1357H210 > 0	X2210 -0.05H210 > 0	
3	10	X1310 -0.1357H310 > 0	X2310 -0.05H310 > 0	
4	10	X1410 -0.1357H410 > 0	X2410 -0.05H410 > 0	
1	11	X1111 -0.1357H111 > 0	X2111 -0.05H111 > 0	
2	11	X1211 -0.1357H211 > 0	X2211 -0.05H211 > 0	
3	11	X1311 -0.1357H311 > 0	X2311 -0.05H311 > 0	
4	11	X1411 -0.1357H411 > 0	X2411 -0.05H411 > 0	
1	12	X1112 -0.1357H112 > 0	X2112 -0.05H112 > 0	
2	12	X1212 -0.1357H212 > 0	X2212 -0.05H212 > 0	
3	12	X1312 -0.1357H312 > 0	X2312 -0.05H312 > 0	
4	12	X1412 -0.1357H412 > 0	X2412 -0.05H412 > 0	
1	13	X1113 -0.1357H113 > 0	X2113 -0.05H113 > 0	
2	13	X1213 -0.1357H213 > 0	X2213 -0.05H213 > 0	
3	13	X1313 -0.1357H313 > 0	X2313 -0.05H313 > 0	
4	13	X1413 -0.1357H413 > 0	X2413 -0.05H413 > 0	
1	14	X1114 -0.1357H114 > 0	X2114 -0.05H114 > 0	
2	14	X1214 -0.1357H214 > 0	X2214 -0.05H214 > 0	
3	14	X1314 -0.1357H314 > 0	X2314 -0.05H314 > 0	
4	14	X1414 -0.1357H414 > 0	X2414 -0.05H414 > 0	
1	15	X1115 -0.1357H115 > 0	X2115 -0.05H115 > 0	
2	15	X1215 -0.1357H215 > 0	X2215 -0.05H215 > 0	
3	15	X1315 -0.1357H315 > 0	X2315 -0.05H315 > 0	
4	15	X1415 -0.1357H415 > 0	X2415 -0.05H415 > 0	
1	16	X1116 -0.1357H116 > 0	X2116 -0.05H116 > 0	
2	16	X1216 -0.1357H216 > 0	X2216 -0.05H216 > 0	
3	16	X1316 -0.1357H316 > 0	X2316 -0.05H316 > 0	
4	16	X1416 -0.1357H416 > 0	X2416 -0.05H416 > 0	
1	17	X1117 -0.1357H117 > 0	X2117 -0.05H117 > 0	
2	17	X1217 -0.1357H217 > 0	X2217 -0.05H217 > 0	
3	17	X1317 -0.1357H317 > 0	X2317 -0.05H317 > 0	
4	17	X1417 -0.1357H417 > 0	X2417 -0.05H417 > 0	
1	18	X1118 -0.1357H118 > 0	X2118 -0.05H118 > 0	
2	18	X1218 -0.1357H218 > 0	X2218 -0.05H218 > 0	
3	18	X1318 -0.1357H318 > 0	X2318 -0.05H318 > 0	
4	18	X1418 -0.1357H418 > 0	X2418 -0.05H418 > 0	
1	19	X1119 -0.1357H119 > 0	X2119 -0.05H119 > 0	
2	19	X1219 -0.1357H219 > 0	X2219 -0.05H219 > 0	
3	19	X1319 -0.1357H319 > 0	X2319 -0.05H319 > 0	
4	19	X1419 -0.1357H419 > 0	X2419 -0.05H419 > 0	
1	20	X1120 -0.1357H120 > 0	X2120 -0.05H120 > 0	
2	20	X1220 -0.1357H220 > 0	X2220 -0.05H220 > 0	
3	20	X1320 -0.1357H320 > 0	X2320 -0.05H320 > 0	
4	20	X1420 -0.1357H420 > 0	X2420 -0.05H420 > 0	
1	21	X1121 -0.1357H121 > 0	X2121 -0.05H121 > 0	
2	21	X1221 -0.1357H221 > 0	X2221 -0.05H221 > 0	
3	21	X1321 -0.1357H321 > 0	X2321 -0.05H321 > 0	
4	21	X1421 -0.1357H421 > 0	X2421 -0.05H421 > 0	
1	22	X1122 -0.1357H122 > 0	X2122 -0.05H122 > 0	
2	22	X1222 -0.1357H222 > 0	X2222 -0.05H222 > 0	
3	22	X1322 -0.1357H322 > 0	X2322 -0.05H322 > 0	
4	22	X1422 -0.1357H422 > 0	X2422 -0.05H422 > 0	
1	23	X1123 -0.1357H123 > 0	X2123 -0.05H123 > 0	
2	23	X1223 -0.1357H223 > 0	X2223 -0.05H223 > 0	
3	23	X1323 -0.1357H323 > 0	X2323 -0.05H323 > 0	
4	23	X1423 -0.1357H423 > 0	X2423 -0.05H423 > 0	
1	24	X1124 -0.1357H124 > 0	X2124 -0.05H124 > 0	
2	24	X1224 -0.1357H224 > 0	X2224 -0.05H224 > 0	
3	24	X1324 -0.1357H324 > 0	X2324 -0.05H324 > 0	
4	24	X1424 -0.1357H424 > 0	X2424 -0.05H424 > 0	
1	25	X1125 -0.1357H125 > 0	X2125 -0.05H125 > 0	
2	25	X1225 -0.1357H225 > 0	X2225 -0.05H225 > 0	
3	25	X1325 -0.1357H325 > 0	X2325 -0.05H325 > 0	
4	25	X1425 -0.1357H425 > 0	X2425 -0.05H425 > 0	
1	26	X1126 -0.1357H126 > 0	X2126 -0.05H126 > 0	
2	26	X1226 -0.1357H226 > 0	X2226 -0.05H226 > 0	
3	26	X1326 -0.1357H326 > 0	X2326 -0.05H326 > 0	
4	26	X1426 -0.1357H426 > 0	X2426 -0.05H426 > 0	
1	27	X1127 -0.1357H127 > 0	X2127 -0.05H127 > 0	
2	27	X1227 -0.1357H227 > 0	X2227 -0.05H227 > 0	
3	27	X1327 -0.1357H327 > 0	X2327 -0.05H327 > 0	
4	27	X1427 -0.1357H427 > 0	X2427 -0.05H427 > 0	
1	28	X1128 -0.1357H128 > 0	X2128 -0.05H128 > 0	
2	28	X1228 -0.1357H228 > 0	X2228 -0.05H228 > 0	
3	28	X1328 -0.1357H328 > 0	X2328 -0.05H328 > 0	
4	28	X1428 -0.1357H428 > 0	X2428 -0.05H428 > 0	
1	29	X1129 -0.1357H129 > 0	X2129 -0.05H129 > 0	
2	29	X1229 -0.1357H229 > 0	X2229 -0.05H229 > 0	
3	29	X1329 -0.1357H329 > 0	X2329 -0.05H329 > 0	
4	29	X1429 -0.1357H429 > 0	X2429 -0.05H429 > 0	
1	30	X1130 -0.1357H130 > 0	X2130 -0.05H130 > 0	
2	30	X1230 -0.1357H230 > 0	X2230 -0.05H230 > 0	
3	30	X1330 -0.1357H330 > 0	X2330 -0.05H330 > 0	
4	30	X1430 -0.1357H430 > 0	X2430 -0.05H430 > 0	

Nota:  
Al actualizar las celdas doradas de arriba se actualizan todas las ecuaciones.

## RESTRICCIONES PARA EL EMPLEO DE LOS INGREDIENTES DEL TIPO 1 (para X3,j,k y X4,j,k)

Lote	Día	X	s1	s2
		3	4	
1	1	X311 - 0.0018N11 > 0	X411 - 0.0178N11 > 0	
2	1	X321 - 0.0018N21 > 0	X421 - 0.0178N21 > 0	
3	1	X331 - 0.0018N31 > 0	X431 - 0.0178N31 > 0	
4	1	X341 - 0.0018N41 > 0	X441 - 0.0178N41 > 0	
1	2	X312 - 0.0018N12 > 0	X412 - 0.0178N12 > 0	
2	2	X322 - 0.0018N22 > 0	X422 - 0.0178N22 > 0	
3	2	X332 - 0.0018N32 > 0	X432 - 0.0178N32 > 0	
4	2	X342 - 0.0018N42 > 0	X442 - 0.0178N42 > 0	
1	3	X313 - 0.0018N13 > 0	X413 - 0.0178N13 > 0	
2	3	X323 - 0.0018N23 > 0	X423 - 0.0178N23 > 0	
3	3	X333 - 0.0018N33 > 0	X433 - 0.0178N33 > 0	
4	3	X343 - 0.0018N43 > 0	X443 - 0.0178N43 > 0	
1	4	X314 - 0.0018N14 > 0	X414 - 0.0178N14 > 0	
2	4	X324 - 0.0018N24 > 0	X424 - 0.0178N24 > 0	
3	4	X334 - 0.0018N34 > 0	X434 - 0.0178N34 > 0	
4	4	X344 - 0.0018N44 > 0	X444 - 0.0178N44 > 0	
1	5	X315 - 0.0018N15 > 0	X415 - 0.0178N15 > 0	
2	5	X325 - 0.0018N25 > 0	X425 - 0.0178N25 > 0	
3	5	X335 - 0.0018N35 > 0	X435 - 0.0178N35 > 0	
4	5	X345 - 0.0018N45 > 0	X445 - 0.0178N45 > 0	
1	6	X316 - 0.0018N16 > 0	X416 - 0.0178N16 > 0	
2	6	X326 - 0.0018N26 > 0	X426 - 0.0178N26 > 0	
3	6	X336 - 0.0018N36 > 0	X436 - 0.0178N36 > 0	
4	6	X346 - 0.0018N46 > 0	X446 - 0.0178N46 > 0	
1	7	X317 - 0.0018N17 > 0	X417 - 0.0178N17 > 0	
2	7	X327 - 0.0018N27 > 0	X427 - 0.0178N27 > 0	
3	7	X337 - 0.0018N37 > 0	X437 - 0.0178N37 > 0	
4	7	X347 - 0.0018N47 > 0	X447 - 0.0178N47 > 0	
1	8	X318 - 0.0018N18 > 0	X418 - 0.0178N18 > 0	
2	8	X328 - 0.0018N28 > 0	X428 - 0.0178N28 > 0	
3	8	X338 - 0.0018N38 > 0	X438 - 0.0178N38 > 0	
4	8	X348 - 0.0018N48 > 0	X448 - 0.0178N48 > 0	
1	9	X319 - 0.0018N19 > 0	X419 - 0.0178N19 > 0	
2	9	X329 - 0.0018N29 > 0	X429 - 0.0178N29 > 0	
3	9	X339 - 0.0018N39 > 0	X439 - 0.0178N39 > 0	
4	9	X349 - 0.0018N49 > 0	X449 - 0.0178N49 > 0	
1	10	X3110 - 0.0018N110 > 0	X4110 - 0.0178N110 > 0	
2	10	X3210 - 0.0018N210 > 0	X4210 - 0.0178N210 > 0	
3	10	X3310 - 0.0018N310 > 0	X4310 - 0.0178N310 > 0	
4	10	X3410 - 0.0018N410 > 0	X4410 - 0.0178N410 > 0	
1	11	X3111 - 0.0018N111 > 0	X4111 - 0.0178N111 > 0	
2	11	X3211 - 0.0018N211 > 0	X4211 - 0.0178N211 > 0	
3	11	X3311 - 0.0018N311 > 0	X4311 - 0.0178N311 > 0	
4	11	X3411 - 0.0018N411 > 0	X4411 - 0.0178N411 > 0	
1	12	X3112 - 0.0018N112 > 0	X4112 - 0.0178N112 > 0	
2	12	X3212 - 0.0018N212 > 0	X4212 - 0.0178N212 > 0	
3	12	X3312 - 0.0018N312 > 0	X4312 - 0.0178N312 > 0	
4	12	X3412 - 0.0018N412 > 0	X4412 - 0.0178N412 > 0	
1	13	X3113 - 0.0018N113 > 0	X4113 - 0.0178N113 > 0	
2	13	X3213 - 0.0018N213 > 0	X4213 - 0.0178N213 > 0	
3	13	X3313 - 0.0018N313 > 0	X4313 - 0.0178N313 > 0	
4	13	X3413 - 0.0018N413 > 0	X4413 - 0.0178N413 > 0	
1	14	X3114 - 0.0018N114 > 0	X4114 - 0.0178N114 > 0	
2	14	X3214 - 0.0018N214 > 0	X4214 - 0.0178N214 > 0	
3	14	X3314 - 0.0018N314 > 0	X4314 - 0.0178N314 > 0	
4	14	X3414 - 0.0018N414 > 0	X4414 - 0.0178N414 > 0	
1	15	X3115 - 0.0018N115 > 0	X4115 - 0.0178N115 > 0	
2	15	X3215 - 0.0018N215 > 0	X4215 - 0.0178N215 > 0	
3	15	X3315 - 0.0018N315 > 0	X4315 - 0.0178N315 > 0	
4	15	X3415 - 0.0018N415 > 0	X4415 - 0.0178N415 > 0	
1	16	X3116 - 0.0018N116 > 0	X4116 - 0.0178N116 > 0	
2	16	X3216 - 0.0018N216 > 0	X4216 - 0.0178N216 > 0	
3	16	X3316 - 0.0018N316 > 0	X4316 - 0.0178N316 > 0	
4	16	X3416 - 0.0018N416 > 0	X4416 - 0.0178N416 > 0	
1	17	X3117 - 0.0018N117 > 0	X4117 - 0.0178N117 > 0	
2	17	X3217 - 0.0018N217 > 0	X4217 - 0.0178N217 > 0	
3	17	X3317 - 0.0018N317 > 0	X4317 - 0.0178N317 > 0	
4	17	X3417 - 0.0018N417 > 0	X4417 - 0.0178N417 > 0	
1	18	X3118 - 0.0018N118 > 0	X4118 - 0.0178N118 > 0	
2	18	X3218 - 0.0018N218 > 0	X4218 - 0.0178N218 > 0	
3	18	X3318 - 0.0018N318 > 0	X4318 - 0.0178N318 > 0	
4	18	X3418 - 0.0018N418 > 0	X4418 - 0.0178N418 > 0	
1	19	X3119 - 0.0018N119 > 0	X4119 - 0.0178N119 > 0	
2	19	X3219 - 0.0018N219 > 0	X4219 - 0.0178N219 > 0	
3	19	X3319 - 0.0018N319 > 0	X4319 - 0.0178N319 > 0	
4	19	X3419 - 0.0018N419 > 0	X4419 - 0.0178N419 > 0	
1	20	X3120 - 0.0018N120 > 0	X4120 - 0.0178N120 > 0	
2	20	X3220 - 0.0018N220 > 0	X4220 - 0.0178N220 > 0	
3	20	X3320 - 0.0018N320 > 0	X4320 - 0.0178N320 > 0	
4	20	X3420 - 0.0018N420 > 0	X4420 - 0.0178N420 > 0	
1	21	X3121 - 0.0018N121 > 0	X4121 - 0.0178N121 > 0	
2	21	X3221 - 0.0018N221 > 0	X4221 - 0.0178N221 > 0	
3	21	X3321 - 0.0018N321 > 0	X4321 - 0.0178N321 > 0	
4	21	X3421 - 0.0018N421 > 0	X4421 - 0.0178N421 > 0	
1	22	X3122 - 0.0018N122 > 0	X4122 - 0.0178N122 > 0	
2	22	X3222 - 0.0018N222 > 0	X4222 - 0.0178N222 > 0	
3	22	X3322 - 0.0018N322 > 0	X4322 - 0.0178N322 > 0	
4	22	X3422 - 0.0018N422 > 0	X4422 - 0.0178N422 > 0	
1	23	X3123 - 0.0018N123 > 0	X4123 - 0.0178N123 > 0	
2	23	X3223 - 0.0018N223 > 0	X4223 - 0.0178N223 > 0	
3	23	X3323 - 0.0018N323 > 0	X4323 - 0.0178N323 > 0	
4	23	X3423 - 0.0018N423 > 0	X4423 - 0.0178N423 > 0	
1	24	X3124 - 0.0018N124 > 0	X4124 - 0.0178N124 > 0	
2	24	X3224 - 0.0018N224 > 0	X4224 - 0.0178N224 > 0	
3	24	X3324 - 0.0018N324 > 0	X4324 - 0.0178N324 > 0	
4	24	X3424 - 0.0018N424 > 0	X4424 - 0.0178N424 > 0	
1	25	X3125 - 0.0018N125 > 0	X4125 - 0.0178N125 > 0	
2	25	X3225 - 0.0018N225 > 0	X4225 - 0.0178N225 > 0	
3	25	X3325 - 0.0018N325 > 0	X4325 - 0.0178N325 > 0	
4	25	X3425 - 0.0018N425 > 0	X4425 - 0.0178N425 > 0	
1	26	X3126 - 0.0018N126 > 0	X4126 - 0.0178N126 > 0	
2	26	X3226 - 0.0018N226 > 0	X4226 - 0.0178N226 > 0	
3	26	X3326 - 0.0018N326 > 0	X4326 - 0.0178N326 > 0	
4	26	X3426 - 0.0018N426 > 0	X4426 - 0.0178N426 > 0	
1	27	X3127 - 0.0018N127 > 0	X4127 - 0.0178N127 > 0	
2	27	X3227 - 0.0018N227 > 0	X4227 - 0.0178N227 > 0	
3	27	X3327 - 0.0018N327 > 0	X4327 - 0.0178N327 > 0	
4	27	X3427 - 0.0018N427 > 0	X4427 - 0.0178N427 > 0	
1	28	X3128 - 0.0018N128 > 0	X4128 - 0.0178N128 > 0	
2	28	X3228 - 0.0018N228 > 0	X4228 - 0.0178N228 > 0	
3	28	X3328 - 0.0018N328 > 0	X4328 - 0.0178N328 > 0	
4	28	X3428 - 0.0018N428 > 0	X4428 - 0.0178N428 > 0	
1	29	X3129 - 0.0018N129 > 0	X4129 - 0.0178N129 > 0	
2	29	X3229 - 0.0018N229 > 0	X4229 - 0.0178N229 > 0	
3	29	X3329 - 0.0018N329 > 0	X4329 - 0.0178N329 > 0	
4	29	X3429 - 0.0018N429 > 0	X4429 - 0.0178N429 > 0	
1	30	X3130 - 0.0018N130 > 0	X4130 - 0.0178N130 > 0	
2	30	X3230 - 0.0018N230 > 0	X4230 - 0.0178N230 > 0	
3	30	X3330 - 0.0018N330 > 0	X4330 - 0.0178N330 > 0	
4	30	X3430 - 0.0018N430 > 0	X4430 - 0.0178N430 > 0	

Nota:  
Al actualizar las celdas doradas de arriba se actualizan todas las ecuaciones.

RESTRICCIONES PARA EL EMPLEO DE LOS INGREDIENTES DEL TIPO 1 (relación entre X<sub>1,j,k</sub> y X<sub>2,j,k</sub>)

Lote	Día	pf	pr	X		pf	pr
				1	2		
1	1	0.0839	0.0309	0.0309X111 -	0.0839X211	>	0
2	1	0.0839	0.0309	0.0309X121 -	0.0839X221	>	0
3	1	0.0839	0.0309	0.0309X131 -	0.0839X231	>	0
4	1	0.0839	0.0309	0.0309X141 -	0.0839X241	>	0
1	2	0.0839	0.0309	0.0309X112 -	0.0839X212	>	0
2	2	0.0839	0.0309	0.0309X122 -	0.0839X222	>	0
3	2	0.0839	0.0309	0.0309X132 -	0.0839X232	>	0
4	2	0.0839	0.0309	0.0309X142 -	0.0839X242	>	0
1	3	0.0839	0.0309	0.0309X113 -	0.0839X213	>	0
2	3	0.0839	0.0309	0.0309X123 -	0.0839X223	>	0
3	3	0.0839	0.0309	0.0309X133 -	0.0839X233	>	0
4	3	0.0839	0.0309	0.0309X143 -	0.0839X243	>	0
1	4	0.0839	0.0309	0.0309X114 -	0.0839X214	>	0
2	4	0.0839	0.0309	0.0309X124 -	0.0839X224	>	0
3	4	0.0839	0.0309	0.0309X134 -	0.0839X234	>	0
4	4	0.0839	0.0309	0.0309X144 -	0.0839X244	>	0
1	5	0.0839	0.0309	0.0309X115 -	0.0839X215	>	0
2	5	0.0839	0.0309	0.0309X125 -	0.0839X225	>	0
3	5	0.0839	0.0309	0.0309X135 -	0.0839X235	>	0
4	5	0.0839	0.0309	0.0309X145 -	0.0839X245	>	0
1	6	0.0839	0.0309	0.0309X116 -	0.0839X216	>	0
2	6	0.0839	0.0309	0.0309X126 -	0.0839X226	>	0
3	6	0.0839	0.0309	0.0309X136 -	0.0839X236	>	0
4	6	0.0839	0.0309	0.0309X146 -	0.0839X246	>	0
1	7	0.0839	0.0309	0.0309X117 -	0.0839X217	>	0
2	7	0.0839	0.0309	0.0309X127 -	0.0839X227	>	0
3	7	0.0839	0.0309	0.0309X137 -	0.0839X237	>	0
4	7	0.0839	0.0309	0.0309X147 -	0.0839X247	>	0
1	8	0.0839	0.0309	0.0309X118 -	0.0839X218	>	0
2	8	0.0839	0.0309	0.0309X128 -	0.0839X228	>	0
3	8	0.0839	0.0309	0.0309X138 -	0.0839X238	>	0
4	8	0.0839	0.0309	0.0309X148 -	0.0839X248	>	0
1	9	0.0839	0.0309	0.0309X119 -	0.0839X219	>	0
2	9	0.0839	0.0309	0.0309X129 -	0.0839X229	>	0
3	9	0.0839	0.0309	0.0309X139 -	0.0839X239	>	0
4	9	0.0839	0.0309	0.0309X149 -	0.0839X249	>	0
1	10	0.0839	0.0309	0.0309X110 -	0.0839X210	>	0
2	10	0.0839	0.0309	0.0309X120 -	0.0839X220	>	0
3	10	0.0839	0.0309	0.0309X130 -	0.0839X230	>	0
4	10	0.0839	0.0309	0.0309X140 -	0.0839X240	>	0
1	11	0.0839	0.0309	0.0309X111 -	0.0839X211	>	0
2	11	0.0839	0.0309	0.0309X121 -	0.0839X221	>	0
3	11	0.0839	0.0309	0.0309X131 -	0.0839X231	>	0
4	11	0.0839	0.0309	0.0309X141 -	0.0839X241	>	0
1	12	0.0839	0.0309	0.0309X112 -	0.0839X212	>	0
2	12	0.0839	0.0309	0.0309X122 -	0.0839X222	>	0
3	12	0.0839	0.0309	0.0309X132 -	0.0839X232	>	0
4	12	0.0839	0.0309	0.0309X142 -	0.0839X242	>	0
1	13	0.0839	0.0309	0.0309X113 -	0.0839X213	>	0
2	13	0.0839	0.0309	0.0309X123 -	0.0839X223	>	0
3	13	0.0839	0.0309	0.0309X133 -	0.0839X233	>	0
4	13	0.0839	0.0309	0.0309X143 -	0.0839X243	>	0
1	14	0.0839	0.0309	0.0309X114 -	0.0839X214	>	0
2	14	0.0839	0.0309	0.0309X124 -	0.0839X224	>	0
3	14	0.0839	0.0309	0.0309X134 -	0.0839X234	>	0
4	14	0.0839	0.0309	0.0309X144 -	0.0839X244	>	0
1	15	0.0839	0.0309	0.0309X115 -	0.0839X215	>	0
2	15	0.0839	0.0309	0.0309X125 -	0.0839X225	>	0
3	15	0.0839	0.0309	0.0309X135 -	0.0839X235	>	0
4	15	0.0839	0.0309	0.0309X145 -	0.0839X245	>	0
1	16	0.0839	0.0309	0.0309X116 -	0.0839X216	>	0
2	16	0.0839	0.0309	0.0309X126 -	0.0839X226	>	0
3	16	0.0839	0.0309	0.0309X136 -	0.0839X236	>	0
4	16	0.0839	0.0309	0.0309X146 -	0.0839X246	>	0
1	17	0.0839	0.0309	0.0309X117 -	0.0839X217	>	0
2	17	0.0839	0.0309	0.0309X127 -	0.0839X227	>	0
3	17	0.0839	0.0309	0.0309X137 -	0.0839X237	>	0
4	17	0.0839	0.0309	0.0309X147 -	0.0839X247	>	0
1	18	0.0839	0.0309	0.0309X118 -	0.0839X218	>	0
2	18	0.0839	0.0309	0.0309X128 -	0.0839X228	>	0
3	18	0.0839	0.0309	0.0309X138 -	0.0839X238	>	0
4	18	0.0839	0.0309	0.0309X148 -	0.0839X248	>	0
1	19	0.0839	0.0309	0.0309X119 -	0.0839X219	>	0
2	19	0.0839	0.0309	0.0309X129 -	0.0839X229	>	0
3	19	0.0839	0.0309	0.0309X139 -	0.0839X239	>	0
4	19	0.0839	0.0309	0.0309X149 -	0.0839X249	>	0
1	20	0.0839	0.0309	0.0309X120 -	0.0839X220	>	0
2	20	0.0839	0.0309	0.0309X130 -	0.0839X230	>	0
3	20	0.0839	0.0309	0.0309X140 -	0.0839X240	>	0
4	20	0.0839	0.0309	0.0309X121 -	0.0839X221	>	0
2	21	0.0839	0.0309	0.0309X121 -	0.0839X221	>	0
3	21	0.0839	0.0309	0.0309X131 -	0.0839X231	>	0
4	21	0.0839	0.0309	0.0309X141 -	0.0839X241	>	0
1	22	0.0839	0.0309	0.0309X112 -	0.0839X212	>	0
2	22	0.0839	0.0309	0.0309X122 -	0.0839X222	>	0
3	22	0.0839	0.0309	0.0309X132 -	0.0839X232	>	0
4	22	0.0839	0.0309	0.0309X142 -	0.0839X242	>	0
1	23	0.0839	0.0309	0.0309X113 -	0.0839X213	>	0
2	23	0.0839	0.0309	0.0309X123 -	0.0839X223	>	0
3	23	0.0839	0.0309	0.0309X133 -	0.0839X233	>	0
4	23	0.0839	0.0309	0.0309X143 -	0.0839X243	>	0
1	24	0.0839	0.0309	0.0309X114 -	0.0839X214	>	0
2	24	0.0839	0.0309	0.0309X124 -	0.0839X224	>	0
3	24	0.0839	0.0309	0.0309X134 -	0.0839X234	>	0
4	24	0.0839	0.0309	0.0309X144 -	0.0839X244	>	0
1	25	0.0839	0.0309	0.0309X115 -	0.0839X215	>	0
2	25	0.0839	0.0309	0.0309X125 -	0.0839X225	>	0
3	25	0.0839	0.0309	0.0309X135 -	0.0839X235	>	0
4	25	0.0839	0.0309	0.0309X145 -	0.0839X245	>	0
1	26	0.0839	0.0309	0.0309X116 -	0.0839X216	>	0
2	26	0.0839	0.0309	0.0309X126 -	0.0839X226	>	0
3	26	0.0839	0.0309	0.0309X136 -	0.0839X236	>	0
4	26	0.0839	0.0309	0.0309X146 -	0.0839X246	>	0
1	27	0.0839	0.0309	0.0309X117 -	0.0839X217	>	0
2	27	0.0839	0.0309	0.0309X127 -	0.0839X227	>	0
3	27	0.0839	0.0309	0.0309X137 -	0.0839X237	>	0
4	27	0.0839	0.0309	0.0309X147 -	0.0839X247	>	0
1	28	0.0839	0.0309	0.0309X118 -	0.0839X218	>	0
2	28	0.0839	0.0309	0.0309X128 -	0.0839X228	>	0
3	28	0.0839	0.0309	0.0309X138 -	0.0839X238	>	0
4	28	0.0839	0.0309	0.0309X148 -	0.0839X248	>	0
1	29	0.0839	0.0309	0.0309X119 -	0.0839X219	>	0
2	29	0.0839	0.0309	0.0309X129 -	0.0839X229	>	0
3	29	0.0839	0.0309	0.0309X139 -	0.0839X239	>	0
4	29	0.0839	0.0309	0.0309X149 -	0.0839X249	>	0
1	30	0.0839	0.0309	0.0309X120 -	0.0839X220	>	0
2	30	0.0839	0.0309	0.0309X130 -	0.0839X230	>	0
3	30	0.0839	0.0309	0.0309X140 -	0.0839X240	>	0

## RESTRICCIONES PARA EL EMPLEO DE LOS COMBUSTIBLES

Lote	Día	V			f1 <b>0.0788</b>	f2 <b>0.7215</b>	f3 <b>0.1809</b>
		1	2	3			
1	1	V111 -0.0788N11 > 0	V211 -0.7215N11 > 0	V311 -0.1809N11 > 0			
2	1	V121 -0.0788N21 > 0	V221 -0.7215N21 > 0	V321 -0.1809N21 > 0			
3	1	V131 -0.0788N31 > 0	V231 -0.7215N31 > 0	V331 -0.1809N31 > 0			
4	1	V141 -0.0788N41 > 0	V241 -0.7215N41 > 0	V341 -0.1809N41 > 0			
1	2	V112 -0.0788N12 > 0	V212 -0.7215N12 > 0	V312 -0.1809N12 > 0			
2	2	V122 -0.0788N22 > 0	V222 -0.7215N22 > 0	V322 -0.1809N22 > 0			
3	2	V132 -0.0788N32 > 0	V232 -0.7215N32 > 0	V332 -0.1809N32 > 0			
4	2	V142 -0.0788N42 > 0	V242 -0.7215N42 > 0	V342 -0.1809N42 > 0			
1	3	V113 -0.0788N13 > 0	V213 -0.7215N13 > 0	V313 -0.1809N13 > 0			
2	3	V123 -0.0788N23 > 0	V223 -0.7215N23 > 0	V323 -0.1809N23 > 0			
3	3	V133 -0.0788N33 > 0	V233 -0.7215N33 > 0	V333 -0.1809N33 > 0			
4	3	V143 -0.0788N43 > 0	V243 -0.7215N43 > 0	V343 -0.1809N43 > 0			
1	4	V114 -0.0788N14 > 0	V214 -0.7215N14 > 0	V314 -0.1809N14 > 0			
2	4	V124 -0.0788N24 > 0	V224 -0.7215N24 > 0	V324 -0.1809N24 > 0			
3	4	V134 -0.0788N34 > 0	V234 -0.7215N34 > 0	V334 -0.1809N34 > 0			
4	4	V144 -0.0788N44 > 0	V244 -0.7215N44 > 0	V344 -0.1809N44 > 0			
1	5	V115 -0.0788N15 > 0	V215 -0.7215N15 > 0	V315 -0.1809N15 > 0			
2	5	V125 -0.0788N25 > 0	V225 -0.7215N25 > 0	V325 -0.1809N25 > 0			
3	5	V135 -0.0788N35 > 0	V235 -0.7215N35 > 0	V335 -0.1809N35 > 0			
4	5	V145 -0.0788N45 > 0	V245 -0.7215N45 > 0	V345 -0.1809N45 > 0			
1	6	V116 -0.0788N16 > 0	V216 -0.7215N16 > 0	V316 -0.1809N16 > 0			
2	6	V126 -0.0788N26 > 0	V226 -0.7215N26 > 0	V326 -0.1809N26 > 0			
3	6	V136 -0.0788N36 > 0	V236 -0.7215N36 > 0	V336 -0.1809N36 > 0			
4	6	V146 -0.0788N46 > 0	V246 -0.7215N46 > 0	V346 -0.1809N46 > 0			
1	7	V117 -0.0788N17 > 0	V217 -0.7215N17 > 0	V317 -0.1809N17 > 0			
2	7	V127 -0.0788N27 > 0	V227 -0.7215N27 > 0	V327 -0.1809N27 > 0			
3	7	V137 -0.0788N37 > 0	V237 -0.7215N37 > 0	V337 -0.1809N37 > 0			
4	7	V147 -0.0788N47 > 0	V247 -0.7215N47 > 0	V347 -0.1809N47 > 0			
1	8	V118 -0.0788N18 > 0	V218 -0.7215N18 > 0	V318 -0.1809N18 > 0			
2	8	V128 -0.0788N28 > 0	V228 -0.7215N28 > 0	V328 -0.1809N28 > 0			
3	8	V138 -0.0788N38 > 0	V238 -0.7215N38 > 0	V338 -0.1809N38 > 0			
4	8	V148 -0.0788N48 > 0	V248 -0.7215N48 > 0	V348 -0.1809N48 > 0			
1	9	V119 -0.0788N19 > 0	V219 -0.7215N19 > 0	V319 -0.1809N19 > 0			
2	9	V129 -0.0788N29 > 0	V229 -0.7215N29 > 0	V329 -0.1809N29 > 0			
3	9	V139 -0.0788N39 > 0	V239 -0.7215N39 > 0	V339 -0.1809N39 > 0			
4	9	V149 -0.0788N49 > 0	V249 -0.7215N49 > 0	V349 -0.1809N49 > 0			
1	10	V110 -0.0788N10 > 0	V210 -0.7215N10 > 0	V310 -0.1809N10 > 0			
2	10	V120 -0.0788N20 > 0	V220 -0.7215N20 > 0	V320 -0.1809N20 > 0			
3	10	V130 -0.0788N30 > 0	V230 -0.7215N30 > 0	V330 -0.1809N30 > 0			
4	10	V140 -0.0788N40 > 0	V240 -0.7215N40 > 0	V340 -0.1809N40 > 0			
1	11	V111 -0.0788N11 > 0	V211 -0.7215N11 > 0	V311 -0.1809N11 > 0			
2	11	V121 -0.0788N21 > 0	V221 -0.7215N21 > 0	V321 -0.1809N21 > 0			
3	11	V131 -0.0788N31 > 0	V231 -0.7215N31 > 0	V331 -0.1809N31 > 0			
4	11	V141 -0.0788N41 > 0	V241 -0.7215N41 > 0	V341 -0.1809N41 > 0			
1	12	V112 -0.0788N12 > 0	V212 -0.7215N12 > 0	V312 -0.1809N12 > 0			
2	12	V122 -0.0788N22 > 0	V222 -0.7215N22 > 0	V322 -0.1809N22 > 0			
3	12	V132 -0.0788N32 > 0	V232 -0.7215N32 > 0	V332 -0.1809N32 > 0			
4	12	V142 -0.0788N42 > 0	V242 -0.7215N42 > 0	V342 -0.1809N42 > 0			
1	13	V113 -0.0788N13 > 0	V213 -0.7215N13 > 0	V313 -0.1809N13 > 0			
2	13	V123 -0.0788N23 > 0	V223 -0.7215N23 > 0	V323 -0.1809N23 > 0			
3	13	V133 -0.0788N33 > 0	V233 -0.7215N33 > 0	V333 -0.1809N33 > 0			
4	13	V143 -0.0788N43 > 0	V243 -0.7215N43 > 0	V343 -0.1809N43 > 0			
1	14	V114 -0.0788N14 > 0	V214 -0.7215N14 > 0	V314 -0.1809N14 > 0			
2	14	V124 -0.0788N24 > 0	V224 -0.7215N24 > 0	V324 -0.1809N24 > 0			
3	14	V134 -0.0788N34 > 0	V234 -0.7215N34 > 0	V334 -0.1809N34 > 0			
4	14	V144 -0.0788N44 > 0	V244 -0.7215N44 > 0	V344 -0.1809N44 > 0			
1	15	V115 -0.0788N15 > 0	V215 -0.7215N15 > 0	V315 -0.1809N15 > 0			
2	15	V125 -0.0788N25 > 0	V225 -0.7215N25 > 0	V325 -0.1809N25 > 0			
3	15	V135 -0.0788N35 > 0	V235 -0.7215N35 > 0	V335 -0.1809N35 > 0			
4	15	V145 -0.0788N45 > 0	V245 -0.7215N45 > 0	V345 -0.1809N45 > 0			
1	16	V116 -0.0788N16 > 0	V216 -0.7215N16 > 0	V316 -0.1809N16 > 0			
2	16	V126 -0.0788N26 > 0	V226 -0.7215N26 > 0	V326 -0.1809N26 > 0			
3	16	V136 -0.0788N36 > 0	V236 -0.7215N36 > 0	V336 -0.1809N36 > 0			
4	16	V146 -0.0788N46 > 0	V246 -0.7215N46 > 0	V346 -0.1809N46 > 0			
1	17	V117 -0.0788N17 > 0	V217 -0.7215N17 > 0	V317 -0.1809N17 > 0			
2	17	V127 -0.0788N27 > 0	V227 -0.7215N27 > 0	V327 -0.1809N27 > 0			
3	17	V137 -0.0788N37 > 0	V237 -0.7215N37 > 0	V337 -0.1809N37 > 0			
4	17	V147 -0.0788N47 > 0	V247 -0.7215N47 > 0	V347 -0.1809N47 > 0			
1	18	V118 -0.0788N18 > 0	V218 -0.7215N18 > 0	V318 -0.1809N18 > 0			
2	18	V128 -0.0788N28 > 0	V228 -0.7215N28 > 0	V328 -0.1809N28 > 0			
3	18	V138 -0.0788N38 > 0	V238 -0.7215N38 > 0	V338 -0.1809N38 > 0			
4	18	V148 -0.0788N48 > 0	V248 -0.7215N48 > 0	V348 -0.1809N48 > 0			
1	19	V119 -0.0788N19 > 0	V219 -0.7215N19 > 0	V319 -0.1809N19 > 0			
2	19	V129 -0.0788N29 > 0	V229 -0.7215N29 > 0	V329 -0.1809N29 > 0			
3	19	V139 -0.0788N39 > 0	V239 -0.7215N39 > 0	V339 -0.1809N39 > 0			
4	19	V149 -0.0788N49 > 0	V249 -0.7215N49 > 0	V349 -0.1809N49 > 0			
1	20	V120 -0.0788N20 > 0	V220 -0.7215N20 > 0	V320 -0.1809N20 > 0			
2	20	V1220 -0.0788N220 > 0	V2220 -0.7215N220 > 0	V3220 -0.1809N220 > 0			
3	20	V1320 -0.0788N320 > 0	V2320 -0.7215N320 > 0	V3320 -0.1809N320 > 0			
4	20	V1420 -0.0788N420 > 0	V2420 -0.7215N420 > 0	V3420 -0.1809N420 > 0			
1	21	V121 -0.0788N21 > 0	V221 -0.7215N21 > 0	V321 -0.1809N21 > 0			
2	21	V1221 -0.0788N221 > 0	V2221 -0.7215N221 > 0	V3221 -0.1809N221 > 0			
3	21	V1321 -0.0788N321 > 0	V2321 -0.7215N321 > 0	V3321 -0.1809N321 > 0			
4	21	V1421 -0.0788N421 > 0	V2421 -0.7215N421 > 0	V3421 -0.1809N421 > 0			
1	22	V122 -0.0788N22 > 0	V222 -0.7215N22 > 0	V322 -0.1809N22 > 0			
2	22	V1222 -0.0788N222 > 0	V2222 -0.7215N222 > 0	V3222 -0.1809N222 > 0			
3	22	V1322 -0.0788N322 > 0	V2322 -0.7215N322 > 0	V3322 -0.1809N322 > 0			
4	22	V1422 -0.0788N422 > 0	V2422 -0.7215N422 > 0	V3422 -0.1809N422 > 0			
1	23	V123 -0.0788N23 > 0	V223 -0.7215N23 > 0	V323 -0.1809N23 > 0			
2	23	V1223 -0.0788N223 > 0	V2223 -0.7215N223 > 0	V3223 -0.1809N223 > 0			
3	23	V1323 -0.0788N323 > 0	V2323 -0.7215N323 > 0	V3323 -0.1809N323 > 0			
4	23	V1423 -0.0788N423 > 0	V2423 -0.7215N423 > 0	V3423 -0.1809N423 > 0			
1	24	V124 -0.0788N24 > 0	V224 -0.7215N24 > 0	V324 -0.1809N24 > 0			
2	24	V1224 -0.0788N224 > 0	V2224 -0.7215N224 > 0	V3224 -0.1809N224 > 0			
3	24	V1324 -0.0788N324 > 0	V2324 -0.7215N324 > 0	V3324 -0.1809N324 > 0			
4	24	V1424 -0.0788N424 > 0	V2424 -0.7215N424 > 0	V3424 -0.1809N424 > 0			
1	25	V125 -0.0788N25 > 0	V225 -0.7215N25 > 0	V325 -0.1809N25 > 0			
2	25	V1225 -0.0788N225 > 0	V2225 -0.7215N225 > 0	V3225 -0.1809N225 > 0			
3	25	V1325 -0.0788N325 > 0	V2325 -0.7215N325 > 0	V3325 -0.1809N325 > 0			
4	25	V1425 -0.0788N425 > 0	V2425 -0.7215N425 > 0	V3425 -0.1809N425 > 0			
1	26	V126 -0.0788N26 > 0	V226 -0.7215N26 > 0	V326 -0.1809N26 > 0			
2	26	V1226 -0.0788N226 > 0	V2226 -0.7215N226 > 0	V3226 -0.1809N226 > 0			
3	26	V1326 -0.0788N326 > 0	V2326 -0.7215N326 > 0	V3326 -0.1809N326 > 0			
4	26	V1426 -0.0788N426 > 0	V2426 -0.7215N426 > 0	V3426 -0.1809N426 > 0			
1	27	V127 -0.0788N27 > 0	V227 -0.7215N27 > 0	V327 -0.1809N27 > 0			
2	27	V1227 -0.0788N227 > 0	V2227 -0				

MIN

345.49X111 + 345.49X121 + 345.49X131 + 345.49X141 + 345.49X211 + 345.49X221 + 345.49X231 +  
345.49X112 + 345.49X122 + 345.49X132 + 345.49X142 + 345.49X212 + 345.49X222 + 345.49X232 +  
345.49X113 + 345.49X123 + 345.49X133 + 345.49X143 + 345.49X213 + 345.49X223 + 345.49X233 +  
345.49X114 + 345.49X124 + 345.49X134 + 345.49X144 + 345.49X214 + 345.49X224 + 345.49X234 +  
345.49X115 + 345.49X125 + 345.49X135 + 345.49X145 + 345.49X215 + 345.49X225 + 345.49X235 +  
345.49X116 + 345.49X126 + 345.49X136 + 345.49X146 + 345.49X216 + 345.49X226 + 345.49X236 +  
345.49X117 + 345.49X127 + 345.49X137 + 345.49X147 + 345.49X217 + 345.49X227 + 345.49X237 +  
345.49X118 + 345.49X128 + 345.49X138 + 345.49X148 + 345.49X218 + 345.49X228 + 345.49X238 +  
345.49X119 + 345.49X129 + 345.49X139 + 345.49X149 + 345.49X219 + 345.49X229 + 345.49X239 +  
345.49X1110 345.49X1210 345.49X1310 345.49X1410 345.49X2110 345.49X2210 345.49X2310  
345.49X1111 345.49X1211 345.49X1311 345.49X1411 345.49X2111 345.49X2211 345.49X2311  
345.49X1112 345.49X1212 345.49X1312 345.49X1412 345.49X2112 345.49X2212 345.49X2312  
345.49X1113 345.49X1213 345.49X1313 345.49X1413 345.49X2113 345.49X2213 345.49X2313  
345.49X1114 345.49X1214 345.49X1314 345.49X1414 345.49X2114 345.49X2214 345.49X2314  
345.49X1115 345.49X1215 345.49X1315 345.49X1415 345.49X2115 345.49X2215 345.49X2315  
345.49X1116 345.49X1216 345.49X1316 345.49X1416 345.49X2116 345.49X2216 345.49X2316  
345.49X1117 345.49X1217 345.49X1317 345.49X1417 345.49X2117 345.49X2217 345.49X2317  
345.49X1118 345.49X1218 345.49X1318 345.49X1418 345.49X2118 345.49X2218 345.49X2318  
345.49X1119 345.49X1219 345.49X1319 345.49X1419 345.49X2119 345.49X2219 345.49X2319  
345.49X1120 345.49X1220 345.49X1320 345.49X1420 345.49X2120 345.49X2220 345.49X2320  
345.49X1121 345.49X1221 345.49X1321 345.49X1421 345.49X2121 345.49X2221 345.49X2321  
345.49X1122 345.49X1222 345.49X1322 345.49X1422 345.49X2122 345.49X2222 345.49X2322  
345.49X1123 345.49X1223 345.49X1323 345.49X1423 345.49X2123 345.49X2223 345.49X2323  
345.49X1124 345.49X1224 345.49X1324 345.49X1424 345.49X2124 345.49X2224 345.49X2324  
345.49X1125 345.49X1225 345.49X1325 345.49X1425 345.49X2125 345.49X2225 345.49X2325  
345.49X1126 345.49X1226 345.49X1326 345.49X1426 345.49X2126 345.49X2226 345.49X2326  
345.49X1127 345.49X1227 345.49X1327 345.49X1427 345.49X2127 345.49X2227 345.49X2327  
345.49X1128 345.49X1228 345.49X1328 345.49X1428 345.49X2128 345.49X2228 345.49X2328  
345.49X1129 345.49X1229 345.49X1329 345.49X1429 345.49X2129 345.49X2229 345.49X2329  
345.49X1130 345.49X1230 345.49X1330 345.49X1430 345.49X2130 345.49X2230 345.49X2330  
1845.98Y111 · 1845.98Y121 · 1845.98Y131 · 1845.98Y141 · 1845.98Y211 · 1845.98Y221 · 1845.98Y231 ·  
1845.98Y112 · 1845.98Y122 · 1845.98Y132 · 1845.98Y142 · 1845.98Y212 · 1845.98Y222 · 1845.98Y232 ·  
1845.98Y113 · 1845.98Y123 · 1845.98Y133 · 1845.98Y143 · 1845.98Y213 · 1845.98Y223 · 1845.98Y233 ·  
1845.98Y114 · 1845.98Y124 · 1845.98Y134 · 1845.98Y144 · 1845.98Y214 · 1845.98Y224 · 1845.98Y234 ·  
1845.98Y115 · 1845.98Y125 · 1845.98Y135 · 1845.98Y145 · 1845.98Y215 · 1845.98Y225 · 1845.98Y235 ·  
1845.98Y116 · 1845.98Y126 · 1845.98Y136 · 1845.98Y146 · 1845.98Y216 · 1845.98Y226 · 1845.98Y236 ·  
1845.98Y117 · 1845.98Y127 · 1845.98Y137 · 1845.98Y147 · 1845.98Y217 · 1845.98Y227 · 1845.98Y237 ·  
1845.98Y118 · 1845.98Y128 · 1845.98Y138 · 1845.98Y148 · 1845.98Y218 · 1845.98Y228 · 1845.98Y238 ·  
1845.98Y119 · 1845.98Y129 · 1845.98Y139 · 1845.98Y149 · 1845.98Y219 · 1845.98Y229 · 1845.98Y239 ·  
1845.98Y1110 1845.98Y1210 1845.98Y1310 1845.98Y1410 1845.98Y2110 1845.98Y2210 1845.98Y2310  
1845.98Y1111 1845.98Y1211 1845.98Y1311 1845.98Y1411 1845.98Y2111 1845.98Y2211 1845.98Y2311  
1845.98Y1112 1845.98Y1212 1845.98Y1312 1845.98Y1412 1845.98Y2112 1845.98Y2212 1845.98Y2312  
1845.98Y1113 1845.98Y1213 1845.98Y1313 1845.98Y1413 1845.98Y2113 1845.98Y2213 1845.98Y2313  
1845.98Y1114 1845.98Y1214 1845.98Y1314 1845.98Y1414 1845.98Y2114 1845.98Y2214 1845.98Y2314  
1845.98Y1115 1845.98Y1215 1845.98Y1315 1845.98Y1415 1845.98Y2115 1845.98Y2215 1845.98Y2315  
1845.98Y1116 1845.98Y1216 1845.98Y1316 1845.98Y1416 1845.98Y2116 1845.98Y2216 1845.98Y2316  
1845.98Y1117 1845.98Y1217 1845.98Y1317 1845.98Y1417 1845.98Y2117 1845.98Y2217 1845.98Y2317  
1845.98Y1118 1845.98Y1218 1845.98Y1318 1845.98Y1418 1845.98Y2118 1845.98Y2218 1845.98Y2318

1845.98Y111 + 1845.98Y121 + 1845.98Y131 + 1845.98Y141 + 1845.98Y211 + 1845.98Y221 + 1845.98Y231 +  
1845.98Y112 + 1845.98Y122 + 1845.98Y132 + 1845.98Y142 + 1845.98Y212 + 1845.98Y222 + 1845.98Y232 +  
1845.98Y1121 1845.98Y1221 1845.98Y1321 1845.98Y1421 1845.98Y2121 1845.98Y2221 1845.98Y2321  
1845.98Y1122 1845.98Y1222 1845.98Y1322 1845.98Y1422 1845.98Y2122 1845.98Y2222 1845.98Y2322  
1845.98Y1123 1845.98Y1223 1845.98Y1323 1845.98Y1423 1845.98Y2123 1845.98Y2223 1845.98Y2323  
1845.98Y1124 1845.98Y1224 1845.98Y1324 1845.98Y1424 1845.98Y2124 1845.98Y2224 1845.98Y2324  
1845.98Y1125 1845.98Y1225 1845.98Y1325 1845.98Y1425 1845.98Y2125 1845.98Y2225 1845.98Y2325  
1845.98Y1126 1845.98Y1226 1845.98Y1326 1845.98Y1426 1845.98Y2126 1845.98Y2226 1845.98Y2326  
1845.98Y1127 1845.98Y1227 1845.98Y1327 1845.98Y1427 1845.98Y2127 1845.98Y2227 1845.98Y2327  
1845.98Y1128 1845.98Y1228 1845.98Y1328 1845.98Y1428 1845.98Y2128 1845.98Y2228 1845.98Y2328  
1845.98Y1129 1845.98Y1229 1845.98Y1329 1845.98Y1429 1845.98Y2129 1845.98Y2229 1845.98Y2329  
1845.98Y1130 1845.98Y1230 1845.98Y1330 1845.98Y1430 1845.98Y2130 1845.98Y2230 1845.98Y2330  
29.12Z111 + 29.12Z121 + 29.12Z131 + 29.12Z141 +  
29.12Z112 + 29.12Z122 + 29.12Z132 + 29.12Z142 +  
29.12Z113 + 29.12Z123 + 29.12Z133 + 29.12Z143 +  
29.12Z114 + 29.12Z124 + 29.12Z134 + 29.12Z144 +  
29.12Z115 + 29.12Z125 + 29.12Z135 + 29.12Z145 +  
29.12Z116 + 29.12Z126 + 29.12Z136 + 29.12Z146 +  
29.12Z117 + 29.12Z127 + 29.12Z137 + 29.12Z147 +  
29.12Z118 + 29.12Z128 + 29.12Z138 + 29.12Z148 +  
29.12Z119 + 29.12Z129 + 29.12Z139 + 29.12Z149 +  
29.12Z110 + 29.12Z120 + 29.12Z130 + 29.12Z1410 +  
29.12Z111 + 29.12Z121 + 29.12Z131 + 29.12Z1411 +  
29.12Z1112 + 29.12Z1212 + 29.12Z1312 + 29.12Z1412 +  
29.12Z1113 + 29.12Z1213 + 29.12Z1313 + 29.12Z1413 +  
29.12Z1114 + 29.12Z1214 + 29.12Z1314 + 29.12Z1414 +  
29.12Z1115 + 29.12Z1215 + 29.12Z1315 + 29.12Z1415 +  
29.12Z1116 + 29.12Z1216 + 29.12Z1316 + 29.12Z1416 +  
29.12Z1117 + 29.12Z1217 + 29.12Z1317 + 29.12Z1417 +  
29.12Z1118 + 29.12Z1218 + 29.12Z1318 + 29.12Z1418 +  
29.12Z1119 + 29.12Z1219 + 29.12Z1319 + 29.12Z1419 +  
29.12Z1120 + 29.12Z1220 + 29.12Z1320 + 29.12Z1420 +  
29.12Z1121 + 29.12Z1221 + 29.12Z1321 + 29.12Z1421 +  
29.12Z1122 + 29.12Z1222 + 29.12Z1322 + 29.12Z1422 +  
29.12Z1123 + 29.12Z1223 + 29.12Z1323 + 29.12Z1423 +  
29.12Z1124 + 29.12Z1224 + 29.12Z1324 + 29.12Z1424 +  
29.12Z1125 + 29.12Z1225 + 29.12Z1325 + 29.12Z1425 +  
29.12Z1126 + 29.12Z1226 + 29.12Z1326 + 29.12Z1426 +  
29.12Z1127 + 29.12Z1227 + 29.12Z1327 + 29.12Z1427 +  
29.12Z1128 + 29.12Z1228 + 29.12Z1328 + 29.12Z1428 +  
29.12Z1129 + 29.12Z1229 + 29.12Z1329 + 29.12Z1429 +  
29.12Z1130 + 29.12Z1230 + 29.12Z1330 + 29.12Z1430 +  
495.35V111 + 495.35V121 + 495.35V131 + 495.35V141 + 6.92V211 + 6.92V221 + 6.92V231 +  
495.35V112 + 495.35V122 + 495.35V132 + 495.35V142 + 6.92V212 + 6.92V222 + 6.92V232 +  
495.35V113 + 495.35V123 + 495.35V133 + 495.35V143 + 6.92V213 + 6.92V223 + 6.92V233 +  
495.35V114 + 495.35V124 + 495.35V134 + 495.35V144 + 6.92V214 + 6.92V224 + 6.92V234 +  
495.35V115 + 495.35V125 + 495.35V135 + 495.35V145 + 6.92V215 + 6.92V225 + 6.92V235 +  
495.35V116 + 495.35V126 + 495.35V136 + 495.35V146 + 6.92V216 + 6.92V226 + 6.92V236 +  
495.35V117 + 495.35V127 + 495.35V137 + 495.35V147 + 6.92V217 + 6.92V227 + 6.92V237 +  
495.35V118 + 495.35V128 + 495.35V138 + 495.35V148 + 6.92V218 + 6.92V228 + 6.92V238 +

495.35V119 + 495.35V129 + 495.35V139 + 495.35V149 + 6.92V219 +	6.92V229 +	6.92V239 +
495.35V1110 495.35V1210 495.35V1310 495.35V1410 6.92V2110 +	6.92V2210 +	6.92V2310 +
495.35V1111 495.35V1211 495.35V1311 495.35V1411 6.92V2111 +	6.92V2211 +	6.92V2311 +
495.35V1112 495.35V1212 495.35V1312 495.35V1412 6.92V2112 +	6.92V2212 +	6.92V2312 +
495.35V1113 495.35V1213 495.35V1313 495.35V1413 6.92V2113 +	6.92V2213 +	6.92V2313 +
495.35V1114 495.35V1214 495.35V1314 495.35V1414 6.92V2114 +	6.92V2214 +	6.92V2314 +
495.35V1115 495.35V1215 495.35V1315 495.35V1415 6.92V2115 +	6.92V2215 +	6.92V2315 +
495.35V1116 495.35V1216 495.35V1316 495.35V1416 6.92V2116 +	6.92V2216 +	6.92V2316 +
495.35V1117 495.35V1217 495.35V1317 495.35V1417 6.92V2117 +	6.92V2217 +	6.92V2317 +
495.35V1118 495.35V1218 495.35V1318 495.35V1418 6.92V2118 +	6.92V2218 +	6.92V2318 +
495.35V1119 495.35V1219 495.35V1319 495.35V1419 6.92V2119 +	6.92V2219 +	6.92V2319 +
495.35V1120 495.35V1220 495.35V1320 495.35V1420 6.92V2120 +	6.92V2220 +	6.92V2320 +
495.35V1121 495.35V1221 495.35V1321 495.35V1421 6.92V2121 +	6.92V2221 +	6.92V2321 +
495.35V1122 495.35V1222 495.35V1322 495.35V1422 6.92V2122 +	6.92V2222 +	6.92V2322 +
495.35V1123 495.35V1223 495.35V1323 495.35V1423 6.92V2123 +	6.92V2223 +	6.92V2323 +
495.35V1124 495.35V1224 495.35V1324 495.35V1424 6.92V2124 +	6.92V2224 +	6.92V2324 +
495.35V1125 495.35V1225 495.35V1325 495.35V1425 6.92V2125 +	6.92V2225 +	6.92V2325 +
495.35V1126 495.35V1226 495.35V1326 495.35V1426 6.92V2126 +	6.92V2226 +	6.92V2326 +
495.35V1127 495.35V1227 495.35V1327 495.35V1427 6.92V2127 +	6.92V2227 +	6.92V2327 +
495.35V1128 495.35V1228 495.35V1328 495.35V1428 6.92V2128 +	6.92V2228 +	6.92V2328 +
495.35V1129 495.35V1229 495.35V1329 495.35V1429 6.92V2129 +	6.92V2229 +	6.92V2329 +
495.35V1130 495.35V1230 495.35V1330 495.35V1430 6.92V2130 +	6.92V2230 +	6.92V2330 +

ST

X111 +	X211 +	X311 +	X411 +	Y111 +	Y211 +	Y311 +
X121 +	X221 +	X321 +	X421 +	Y121 +	Y221 +	Y321 +
X131 +	X231 +	X331 +	X431 +	Y131 +	Y231 +	Y331 +
X141 +	X241 +	X341 +	X441 +	Y141 +	Y241 +	Y341 +
X112 +	X212 +	X312 +	X412 +	Y112 +	Y212 +	Y312 +
X122 +	X222 +	X322 +	X422 +	Y122 +	Y222 +	Y322 +
X132 +	X232 +	X332 +	X432 +	Y132 +	Y232 +	Y332 +
X142 +	X242 +	X342 +	X442 +	Y142 +	Y242 +	Y342 +
X113 +	X213 +	X313 +	X413 +	Y113 +	Y213 +	Y313 +
X123 +	X223 +	X323 +	X423 +	Y123 +	Y223 +	Y323 +
X133 +	X233 +	X333 +	X433 +	Y133 +	Y233 +	Y333 +
X143 +	X243 +	X343 +	X443 +	Y143 +	Y243 +	Y343 +
X114 +	X214 +	X314 +	X414 +	Y114 +	Y214 +	Y314 +
X124 +	X224 +	X324 +	X424 +	Y124 +	Y224 +	Y324 +
X134 +	X234 +	X334 +	X434 +	Y134 +	Y234 +	Y334 +
X144 +	X244 +	X344 +	X444 +	Y144 +	Y244 +	Y344 +
X115 +	X215 +	X315 +	X415 +	Y115 +	Y215 +	Y315 +
X125 +	X225 +	X325 +	X425 +	Y125 +	Y225 +	Y325 +
X135 +	X235 +	X335 +	X435 +	Y135 +	Y235 +	Y335 +
X145 +	X245 +	X345 +	X445 +	Y145 +	Y245 +	Y345 +
X116 +	X216 +	X316 +	X416 +	Y116 +	Y216 +	Y316 +
X126 +	X226 +	X326 +	X426 +	Y126 +	Y226 +	Y326 +
X136 +	X236 +	X336 +	X436 +	Y136 +	Y236 +	Y336 +
X146 +	X246 +	X346 +	X446 +	Y146 +	Y246 +	Y346 +

X117 +	X217 +	X317 +	X417 +	Y117 +	Y217 +	Y317 +
X127 +	X227 +	X327 +	X427 +	Y127 +	Y227 +	Y327 +
X137 +	X237 +	X337 +	X437 +	Y137 +	Y237 +	Y337 +
X147 +	X247 +	X347 +	X447 +	Y147 +	Y247 +	Y347 +
X118 +	X218 +	X318 +	X418 +	Y118 +	Y218 +	Y318 +
X128 +	X228 +	X328 +	X428 +	Y128 +	Y228 +	Y328 +
X138 +	X238 +	X338 +	X438 +	Y138 +	Y238 +	Y338 +
X148 +	X248 +	X348 +	X448 +	Y148 +	Y248 +	Y348 +
X119 +	X219 +	X319 +	X419 +	Y119 +	Y219 +	Y319 +
X129 +	X229 +	X329 +	X429 +	Y129 +	Y229 +	Y329 +
X139 +	X239 +	X339 +	X439 +	Y139 +	Y239 +	Y339 +
X149 +	X249 +	X349 +	X449 +	Y149 +	Y249 +	Y349 +
X1110 +	X2110 +	X3110 +	X4110 +	Y1110 +	Y2110 +	Y3110 +
X1210 +	X2210 +	X3210 +	X4210 +	Y1210 +	Y2210 +	Y3210 +
X1310 +	X2310 +	X3310 +	X4310 +	Y1310 +	Y2310 +	Y3310 +
X1410 +	X2410 +	X3410 +	X4410 +	Y1410 +	Y2410 +	Y3410 +
X1111 +	X2111 +	X3111 +	X4111 +	Y1111 +	Y2111 +	Y3111 +
X1211 +	X2211 +	X3211 +	X4211 +	Y1211 +	Y2211 +	Y3211 +
X1311 +	X2311 +	X3311 +	X4311 +	Y1311 +	Y2311 +	Y3311 +
X1411 +	X2411 +	X3411 +	X4411 +	Y1411 +	Y2411 +	Y3411 +
X1112 +	X2112 +	X3112 +	X4112 +	Y1112 +	Y2112 +	Y3112 +
X1212 +	X2212 +	X3212 +	X4212 +	Y1212 +	Y2212 +	Y3212 +
X1312 +	X2312 +	X3312 +	X4312 +	Y1312 +	Y2312 +	Y3312 +
X1412 +	X2412 +	X3412 +	X4412 +	Y1412 +	Y2412 +	Y3412 +
X1113 +	X2113 +	X3113 +	X4113 +	Y1113 +	Y2113 +	Y3113 +
X1213 +	X2213 +	X3213 +	X4213 +	Y1213 +	Y2213 +	Y3213 +
X1313 +	X2313 +	X3313 +	X4313 +	Y1313 +	Y2313 +	Y3313 +
X1413 +	X2413 +	X3413 +	X4413 +	Y1413 +	Y2413 +	Y3413 +
X1114 +	X2114 +	X3114 +	X4114 +	Y1114 +	Y2114 +	Y3114 +
X1214 +	X2214 +	X3214 +	X4214 +	Y1214 +	Y2214 +	Y3214 +
X1314 +	X2314 +	X3314 +	X4314 +	Y1314 +	Y2314 +	Y3314 +
X1414 +	X2414 +	X3414 +	X4414 +	Y1414 +	Y2414 +	Y3414 +
X1115 +	X2115 +	X3115 +	X4115 +	Y1115 +	Y2115 +	Y3115 +
X1215 +	X2215 +	X3215 +	X4215 +	Y1215 +	Y2215 +	Y3215 +
X1315 +	X2315 +	X3315 +	X4315 +	Y1315 +	Y2315 +	Y3315 +
X1415 +	X2415 +	X3415 +	X4415 +	Y1415 +	Y2415 +	Y3415 +
X1116 +	X2116 +	X3116 +	X4116 +	Y1116 +	Y2116 +	Y3116 +
X1216 +	X2216 +	X3216 +	X4216 +	Y1216 +	Y2216 +	Y3216 +
X1316 +	X2316 +	X3316 +	X4316 +	Y1316 +	Y2316 +	Y3316 +
X1416 +	X2416 +	X3416 +	X4416 +	Y1416 +	Y2416 +	Y3416 +
X1117 +	X2117 +	X3117 +	X4117 +	Y1117 +	Y2117 +	Y3117 +
X1217 +	X2217 +	X3217 +	X4217 +	Y1217 +	Y2217 +	Y3217 +
X1317 +	X2317 +	X3317 +	X4317 +	Y1317 +	Y2317 +	Y3317 +
X1417 +	X2417 +	X3417 +	X4417 +	Y1417 +	Y2417 +	Y3417 +
X1118 +	X2118 +	X3118 +	X4118 +	Y1118 +	Y2118 +	Y3118 +
X1218 +	X2218 +	X3218 +	X4218 +	Y1218 +	Y2218 +	Y3218 +
X1318 +	X2318 +	X3318 +	X4318 +	Y1318 +	Y2318 +	Y3318 +
X1418 +	X2418 +	X3418 +	X4418 +	Y1418 +	Y2418 +	Y3418 +
X1119 +	X2119 +	X3119 +	X4119 +	Y1119 +	Y2119 +	Y3119 +
X1219 +	X2219 +	X3219 +	X4219 +	Y1219 +	Y2219 +	Y3219 +

X1319 +	X2319 +	X3319 +	X4319 +	Y1319 +	Y2319 +	Y3319 +
X1419 +	X2419 +	X3419 +	X4419 +	Y1419 +	Y2419 +	Y3419 +
X1120 +	X2120 +	X3120 +	X4120 +	Y1120 +	Y2120 +	Y3120 +
X1220 +	X2220 +	X3220 +	X4220 +	Y1220 +	Y2220 +	Y3220 +
X1320 +	X2320 +	X3320 +	X4320 +	Y1320 +	Y2320 +	Y3320 +
X1420 +	X2420 +	X3420 +	X4420 +	Y1420 +	Y2420 +	Y3420 +
X1121 +	X2121 +	X3121 +	X4121 +	Y1121 +	Y2121 +	Y3121 +
X1221 +	X2221 +	X3221 +	X4221 +	Y1221 +	Y2221 +	Y3221 +
X1321 +	X2321 +	X3321 +	X4321 +	Y1321 +	Y2321 +	Y3321 +
X1421 +	X2421 +	X3421 +	X4421 +	Y1421 +	Y2421 +	Y3421 +
X1122 +	X2122 +	X3122 +	X4122 +	Y1122 +	Y2122 +	Y3122 +
X1222 +	X2222 +	X3222 +	X4222 +	Y1222 +	Y2222 +	Y3222 +
X1322 +	X2322 +	X3322 +	X4322 +	Y1322 +	Y2322 +	Y3322 +
X1422 +	X2422 +	X3422 +	X4422 +	Y1422 +	Y2422 +	Y3422 +
X1123 +	X2123 +	X3123 +	X4123 +	Y1123 +	Y2123 +	Y3123 +
X1223 +	X2223 +	X3223 +	X4223 +	Y1223 +	Y2223 +	Y3223 +
X1323 +	X2323 +	X3323 +	X4323 +	Y1323 +	Y2323 +	Y3323 +
X1423 +	X2423 +	X3423 +	X4423 +	Y1423 +	Y2423 +	Y3423 +
X1124 +	X2124 +	X3124 +	X4124 +	Y1124 +	Y2124 +	Y3124 +
X1224 +	X2224 +	X3224 +	X4224 +	Y1224 +	Y2224 +	Y3224 +
X1324 +	X2324 +	X3324 +	X4324 +	Y1324 +	Y2324 +	Y3324 +
X1424 +	X2424 +	X3424 +	X4424 +	Y1424 +	Y2424 +	Y3424 +
X1125 +	X2125 +	X3125 +	X4125 +	Y1125 +	Y2125 +	Y3125 +
X1225 +	X2225 +	X3225 +	X4225 +	Y1225 +	Y2225 +	Y3225 +
X1325 +	X2325 +	X3325 +	X4325 +	Y1325 +	Y2325 +	Y3325 +
X1425 +	X2425 +	X3425 +	X4425 +	Y1425 +	Y2425 +	Y3425 +
X1126 +	X2126 +	X3126 +	X4126 +	Y1126 +	Y2126 +	Y3126 +
X1226 +	X2226 +	X3226 +	X4226 +	Y1226 +	Y2226 +	Y3226 +
X1326 +	X2326 +	X3326 +	X4326 +	Y1326 +	Y2326 +	Y3326 +
X1426 +	X2426 +	X3426 +	X4426 +	Y1426 +	Y2426 +	Y3426 +
X1127 +	X2127 +	X3127 +	X4127 +	Y1127 +	Y2127 +	Y3127 +
X1227 +	X2227 +	X3227 +	X4227 +	Y1227 +	Y2227 +	Y3227 +
X1327 +	X2327 +	X3327 +	X4327 +	Y1327 +	Y2327 +	Y3327 +
X1427 +	X2427 +	X3427 +	X4427 +	Y1427 +	Y2427 +	Y3427 +
X1128 +	X2128 +	X3128 +	X4128 +	Y1128 +	Y2128 +	Y3128 +
X1228 +	X2228 +	X3228 +	X4228 +	Y1228 +	Y2228 +	Y3228 +
X1328 +	X2328 +	X3328 +	X4328 +	Y1328 +	Y2328 +	Y3328 +
X1428 +	X2428 +	X3428 +	X4428 +	Y1428 +	Y2428 +	Y3428 +
X1129 +	X2129 +	X3129 +	X4129 +	Y1129 +	Y2129 +	Y3129 +
X1229 +	X2229 +	X3229 +	X4229 +	Y1229 +	Y2229 +	Y3229 +
X1329 +	X2329 +	X3329 +	X4329 +	Y1329 +	Y2329 +	Y3329 +
X1429 +	X2429 +	X3429 +	X4429 +	Y1429 +	Y2429 +	Y3429 +
X1130 +	X2130 +	X3130 +	X4130 +	Y1130 +	Y2130 +	Y3130 +
X1230 +	X2230 +	X3230 +	X4230 +	Y1230 +	Y2230 +	Y3230 +
X1330 +	X2330 +	X3330 +	X4330 +	Y1330 +	Y2330 +	Y3330 +
X1430 +	X2430 +	X3430 +	X4430 +	Y1430 +	Y2430 +	Y3430 +

N11	<	130
N21	<	130
N31	<	130

Global optimal solution found.

Objective value: 0.2823009E+08  
Total solver iterations: 1024

Variable	Value	Reduced Cost
X111	13.76580	0.000000
X121	13.76580	0.000000
X131	13.76580	0.000000
X141	13.76580	0.000000
X211	5.069884	0.000000
X221	5.069884	0.000000
X231	5.069884	0.000000
X241	5.069884	0.000000
X311	0.2340000	0.000000
X321	0.2340000	0.000000
X331	0.2340000	0.000000
X341	0.2340000	0.000000
X411	2.314000	0.000000
X421	2.314000	0.000000
X431	2.314000	0.000000
X441	2.314000	0.000000
X112	13.76580	0.000000
X122	13.76580	0.000000
X132	13.76580	0.000000
X142	13.76580	0.000000
X212	5.069884	0.000000
X222	5.069884	0.000000
X232	5.069884	0.000000
X242	5.069884	0.000000
X312	0.2340000	0.000000
X322	0.2340000	0.000000
X332	0.2340000	0.000000
X342	0.2340000	0.000000
X412	2.314000	0.000000
X422	2.314000	0.000000
X432	2.314000	0.000000
X442	2.314000	0.000000
X113	13.76580	0.000000
X123	13.76580	0.000000
X133	13.76580	0.000000
X143	13.76580	0.000000
X213	5.069884	0.000000
X223	5.069884	0.000000
X233	5.069884	0.000000
X243	5.069884	0.000000
X313	0.2340000	0.000000
X323	0.2340000	0.000000
X333	0.2340000	0.000000
X343	0.2340000	0.000000

# FUNCIÓN OBJETIVO

## COSTO DE X1

1

**345.49**

### Lote

Día	1	2	3	4
1	345.49X111 +	345.49X121 +	345.49X131 +	345.49X141 +
2	345.49X112 +	345.49X122 +	345.49X132 +	345.49X142 +
3	345.49X113 +	345.49X123 +	345.49X133 +	345.49X143 +
4	345.49X114 +	345.49X124 +	345.49X134 +	345.49X144 +
5	345.49X115 +	345.49X125 +	345.49X135 +	345.49X145 +
6	345.49X116 +	345.49X126 +	345.49X136 +	345.49X146 +
7	345.49X117 +	345.49X127 +	345.49X137 +	345.49X147 +
8	345.49X118 +	345.49X128 +	345.49X138 +	345.49X148 +
9	345.49X119 +	345.49X129 +	345.49X139 +	345.49X149 +
10	345.49X1110 +	345.49X1210 +	345.49X1310 +	345.49X1410 +
11	345.49X1111 +	345.49X1211 +	345.49X1311 +	345.49X1411 +
12	345.49X1112 +	345.49X1212 +	345.49X1312 +	345.49X1412 +
13	345.49X1113 +	345.49X1213 +	345.49X1313 +	345.49X1413 +
14	345.49X1114 +	345.49X1214 +	345.49X1314 +	345.49X1414 +
15	345.49X1115 +	345.49X1215 +	345.49X1315 +	345.49X1415 +
16	345.49X1116 +	345.49X1216 +	345.49X1316 +	345.49X1416 +
17	345.49X1117 +	345.49X1217 +	345.49X1317 +	345.49X1417 +
18	345.49X1118 +	345.49X1218 +	345.49X1318 +	345.49X1418 +
19	345.49X1119 +	345.49X1219 +	345.49X1319 +	345.49X1419 +
20	345.49X1120 +	345.49X1220 +	345.49X1320 +	345.49X1420 +
21	345.49X1121 +	345.49X1221 +	345.49X1321 +	345.49X1421 +
22	345.49X1122 +	345.49X1222 +	345.49X1322 +	345.49X1422 +
23	345.49X1123 +	345.49X1223 +	345.49X1323 +	345.49X1423 +
24	345.49X1124 +	345.49X1224 +	345.49X1324 +	345.49X1424 +
25	345.49X1125 +	345.49X1225 +	345.49X1325 +	345.49X1425 +
26	345.49X1126 +	345.49X1226 +	345.49X1326 +	345.49X1426 +
27	345.49X1127 +	345.49X1227 +	345.49X1327 +	345.49X1427 +
28	345.49X1128 +	345.49X1228 +	345.49X1328 +	345.49X1428 +
29	345.49X1129 +	345.49X1229 +	345.49X1329 +	345.49X1429 +
30	345.49X1130 +	345.49X1230 +	345.49X1330 +	345.49X1430 +

## COSTO DE Y1

1

**1845.98**

### Lote

Día	1	2	3	4
1	1845.98Y111 +	1845.98Y121 +	1845.98Y131 +	1845.98Y141 +
2	1845.98Y112 +	1845.98Y122 +	1845.98Y132 +	1845.98Y142 +
3	1845.98Y113 +	1845.98Y123 +	1845.98Y133 +	1845.98Y143 +
4	1845.98Y114 +	1845.98Y124 +	1845.98Y134 +	1845.98Y144 +
5	1845.98Y115 +	1845.98Y125 +	1845.98Y135 +	1845.98Y145 +
6	1845.98Y116 +	1845.98Y126 +	1845.98Y136 +	1845.98Y146 +

7	1845.98Y117 +	1845.98Y127 +	1845.98Y137 +	1845.98Y147 +
8	1845.98Y118 +	1845.98Y128 +	1845.98Y138 +	1845.98Y148 +
9	1845.98Y119 +	1845.98Y129 +	1845.98Y139 +	1845.98Y149 +
10	1845.98Y1110 +	1845.98Y1210 +	1845.98Y1310 +	1845.98Y1410 +
11	1845.98Y1111 +	1845.98Y1211 +	1845.98Y1311 +	1845.98Y1411 +
12	1845.98Y1112 +	1845.98Y1212 +	1845.98Y1312 +	1845.98Y1412 +
13	1845.98Y1113 +	1845.98Y1213 +	1845.98Y1313 +	1845.98Y1413 +
14	1845.98Y1114 +	1845.98Y1214 +	1845.98Y1314 +	1845.98Y1414 +
15	1845.98Y1115 +	1845.98Y1215 +	1845.98Y1315 +	1845.98Y1415 +
16	1845.98Y1116 +	1845.98Y1216 +	1845.98Y1316 +	1845.98Y1416 +
17	1845.98Y1117 +	1845.98Y1217 +	1845.98Y1317 +	1845.98Y1417 +
18	1845.98Y1118 +	1845.98Y1218 +	1845.98Y1318 +	1845.98Y1418 +
19	1845.98Y1119 +	1845.98Y1219 +	1845.98Y1319 +	1845.98Y1419 +
20	1845.98Y1120 +	1845.98Y1220 +	1845.98Y1320 +	1845.98Y1420 +
21	1845.98Y1121 +	1845.98Y1221 +	1845.98Y1321 +	1845.98Y1421 +
22	1845.98Y1122 +	1845.98Y1222 +	1845.98Y1322 +	1845.98Y1422 +
23	1845.98Y1123 +	1845.98Y1223 +	1845.98Y1323 +	1845.98Y1423 +
24	1845.98Y1124 +	1845.98Y1224 +	1845.98Y1324 +	1845.98Y1424 +
25	1845.98Y1125 +	1845.98Y1225 +	1845.98Y1325 +	1845.98Y1425 +
26	1845.98Y1126 +	1845.98Y1226 +	1845.98Y1326 +	1845.98Y1426 +
27	1845.98Y1127 +	1845.98Y1227 +	1845.98Y1327 +	1845.98Y1427 +
28	1845.98Y1128 +	1845.98Y1228 +	1845.98Y1328 +	1845.98Y1428 +
29	1845.98Y1129 +	1845.98Y1229 +	1845.98Y1329 +	1845.98Y1429 +
30	1845.98Y1130 +	1845.98Y1230 +	1845.98Y1330 +	1845.98Y1430 +

## COSTO DE Z1

1

**29.12**

## Lote

Día	1	2	3	4
1	29.12Z111 +	29.12Z121 +	29.12Z131 +	29.12Z141 +
2	29.12Z112 +	29.12Z122 +	29.12Z132 +	29.12Z142 +
3	29.12Z113 +	29.12Z123 +	29.12Z133 +	29.12Z143 +
4	29.12Z114 +	29.12Z124 +	29.12Z134 +	29.12Z144 +
5	29.12Z115 +	29.12Z125 +	29.12Z135 +	29.12Z145 +
6	29.12Z116 +	29.12Z126 +	29.12Z136 +	29.12Z146 +
7	29.12Z117 +	29.12Z127 +	29.12Z137 +	29.12Z147 +
8	29.12Z118 +	29.12Z128 +	29.12Z138 +	29.12Z148 +
9	29.12Z119 +	29.12Z129 +	29.12Z139 +	29.12Z149 +
10	29.12Z1110 +	29.12Z1210 +	29.12Z1310 +	29.12Z1410 +
11	29.12Z1111 +	29.12Z1211 +	29.12Z1311 +	29.12Z1411 +
12	29.12Z1112 +	29.12Z1212 +	29.12Z1312 +	29.12Z1412 +
13	29.12Z1113 +	29.12Z1213 +	29.12Z1313 +	29.12Z1413 +
14	29.12Z1114 +	29.12Z1214 +	29.12Z1314 +	29.12Z1414 +
15	29.12Z1115 +	29.12Z1215 +	29.12Z1315 +	29.12Z1415 +
16	29.12Z1116 +	29.12Z1216 +	29.12Z1316 +	29.12Z1416 +
17	29.12Z1117 +	29.12Z1217 +	29.12Z1317 +	29.12Z1417 +
18	29.12Z1118 +	29.12Z1218 +	29.12Z1318 +	29.12Z1418 +
19	29.12Z1119 +	29.12Z1219 +	29.12Z1319 +	29.12Z1419 +
20	29.12Z1120 +	29.12Z1220 +	29.12Z1320 +	29.12Z1420 +

21	29.12Z1121 +	29.12Z1221 +	29.12Z1321 +	29.12Z1421 +
22	29.12Z1122 +	29.12Z1222 +	29.12Z1322 +	29.12Z1422 +
23	29.12Z1123 +	29.12Z1223 +	29.12Z1323 +	29.12Z1423 +
24	29.12Z1124 +	29.12Z1224 +	29.12Z1324 +	29.12Z1424 +
25	29.12Z1125 +	29.12Z1225 +	29.12Z1325 +	29.12Z1425 +
26	29.12Z1126 +	29.12Z1226 +	29.12Z1326 +	29.12Z1426 +
27	29.12Z1127 +	29.12Z1227 +	29.12Z1327 +	29.12Z1427 +
28	29.12Z1128 +	29.12Z1228 +	29.12Z1328 +	29.12Z1428 +
29	29.12Z1129 +	29.12Z1229 +	29.12Z1329 +	29.12Z1429 +
30	29.12Z1130 +	29.12Z1230 +	29.12Z1330 +	29.12Z1430 +

**COSTO DE V1**

1	<b>495.35</b>	2	3

**Lote**

Día	1	2	3	4
1	495.35V111 +	495.35V121 +	495.35V131 +	495.35V141 +
2	495.35V112 +	495.35V122 +	495.35V132 +	495.35V142 +
3	495.35V113 +	495.35V123 +	495.35V133 +	495.35V143 +
4	495.35V114 +	495.35V124 +	495.35V134 +	495.35V144 +
5	495.35V115 +	495.35V125 +	495.35V135 +	495.35V145 +
6	495.35V116 +	495.35V126 +	495.35V136 +	495.35V146 +
7	495.35V117 +	495.35V127 +	495.35V137 +	495.35V147 +
8	495.35V118 +	495.35V128 +	495.35V138 +	495.35V148 +
9	495.35V119 +	495.35V129 +	495.35V139 +	495.35V149 +
10	495.35V1110 +	495.35V1210 +	495.35V1310 +	495.35V1410 +
11	495.35V1111 +	495.35V1211 +	495.35V1311 +	495.35V1411 +
12	495.35V1112 +	495.35V1212 +	495.35V1312 +	495.35V1412 +
13	495.35V1113 +	495.35V1213 +	495.35V1313 +	495.35V1413 +
14	495.35V1114 +	495.35V1214 +	495.35V1314 +	495.35V1414 +
15	495.35V1115 +	495.35V1215 +	495.35V1315 +	495.35V1415 +
16	495.35V1116 +	495.35V1216 +	495.35V1316 +	495.35V1416 +
17	495.35V1117 +	495.35V1217 +	495.35V1317 +	495.35V1417 +
18	495.35V1118 +	495.35V1218 +	495.35V1318 +	495.35V1418 +
19	495.35V1119 +	495.35V1219 +	495.35V1319 +	495.35V1419 +
20	495.35V1120 +	495.35V1220 +	495.35V1320 +	495.35V1420 +
21	495.35V1121 +	495.35V1221 +	495.35V1321 +	495.35V1421 +
22	495.35V1122 +	495.35V1222 +	495.35V1322 +	495.35V1422 +
23	495.35V1123 +	495.35V1223 +	495.35V1323 +	495.35V1423 +
24	495.35V1124 +	495.35V1224 +	495.35V1324 +	495.35V1424 +
25	495.35V1125 +	495.35V1225 +	495.35V1325 +	495.35V1425 +
26	495.35V1126 +	495.35V1226 +	495.35V1326 +	495.35V1426 +
27	495.35V1127 +	495.35V1227 +	495.35V1327 +	495.35V1427 +
28	495.35V1128 +	495.35V1228 +	495.35V1328 +	495.35V1428 +
29	495.35V1129 +	495.35V1229 +	495.35V1329 +	495.35V1429 +
30	495.35V1130 +	495.35V1230 +	495.35V1330 +	495.35V1430 +

## COSTO DE X2

2

**345.49**

## Lote

Día	1	2	3	4
1	345.49X211 +	345.49X221 +	345.49X231 +	345.49X241 +
2	345.49X212 +	345.49X222 +	345.49X232 +	345.49X242 +
3	345.49X213 +	345.49X223 +	345.49X233 +	345.49X243 +
4	345.49X214 +	345.49X224 +	345.49X234 +	345.49X244 +
5	345.49X215 +	345.49X225 +	345.49X235 +	345.49X245 +
6	345.49X216 +	345.49X226 +	345.49X236 +	345.49X246 +
7	345.49X217 +	345.49X227 +	345.49X237 +	345.49X247 +
8	345.49X218 +	345.49X228 +	345.49X238 +	345.49X248 +
9	345.49X219 +	345.49X229 +	345.49X239 +	345.49X249 +
10	345.49X2110 +	345.49X2210 +	345.49X2310 +	345.49X2410 +
11	345.49X2111 +	345.49X2211 +	345.49X2311 +	345.49X2411 +
12	345.49X2112 +	345.49X2212 +	345.49X2312 +	345.49X2412 +
13	345.49X2113 +	345.49X2213 +	345.49X2313 +	345.49X2413 +
14	345.49X2114 +	345.49X2214 +	345.49X2314 +	345.49X2414 +
15	345.49X2115 +	345.49X2215 +	345.49X2315 +	345.49X2415 +
16	345.49X2116 +	345.49X2216 +	345.49X2316 +	345.49X2416 +
17	345.49X2117 +	345.49X2217 +	345.49X2317 +	345.49X2417 +
18	345.49X2118 +	345.49X2218 +	345.49X2318 +	345.49X2418 +
19	345.49X2119 +	345.49X2219 +	345.49X2319 +	345.49X2419 +
20	345.49X2120 +	345.49X2220 +	345.49X2320 +	345.49X2420 +
21	345.49X2121 +	345.49X2221 +	345.49X2321 +	345.49X2421 +
22	345.49X2122 +	345.49X2222 +	345.49X2322 +	345.49X2422 +
23	345.49X2123 +	345.49X2223 +	345.49X2323 +	345.49X2423 +
24	345.49X2124 +	345.49X2224 +	345.49X2324 +	345.49X2424 +
25	345.49X2125 +	345.49X2225 +	345.49X2325 +	345.49X2425 +
26	345.49X2126 +	345.49X2226 +	345.49X2326 +	345.49X2426 +
27	345.49X2127 +	345.49X2227 +	345.49X2327 +	345.49X2427 +
28	345.49X2128 +	345.49X2228 +	345.49X2328 +	345.49X2428 +
29	345.49X2129 +	345.49X2229 +	345.49X2329 +	345.49X2429 +
30	345.49X2130 +	345.49X2230 +	345.49X2330 +	345.49X2430 +

## COSTO DE Y2

2

**1845.98**

## Lote

Día	1	2	3	4
1	1845.98Y211 +	1845.98Y221 +	1845.98Y231 +	1845.98Y241 +
2	1845.98Y212 +	1845.98Y222 +	1845.98Y232 +	1845.98Y242 +
3	1845.98Y213 +	1845.98Y223 +	1845.98Y233 +	1845.98Y243 +
4	1845.98Y214 +	1845.98Y224 +	1845.98Y234 +	1845.98Y244 +
5	1845.98Y215 +	1845.98Y225 +	1845.98Y235 +	1845.98Y245 +
6	1845.98Y216 +	1845.98Y226 +	1845.98Y236 +	1845.98Y246 +

7	1845.98Y217 +	1845.98Y227 +	1845.98Y237 +	1845.98Y247 +
8	1845.98Y218 +	1845.98Y228 +	1845.98Y238 +	1845.98Y248 +
9	1845.98Y219 +	1845.98Y229 +	1845.98Y239 +	1845.98Y249 +
10	1845.98Y2110 +	1845.98Y2210 +	1845.98Y2310 +	1845.98Y2410 +
11	1845.98Y2111 +	1845.98Y2211 +	1845.98Y2311 +	1845.98Y2411 +
12	1845.98Y2112 +	1845.98Y2212 +	1845.98Y2312 +	1845.98Y2412 +
13	1845.98Y2113 +	1845.98Y2213 +	1845.98Y2313 +	1845.98Y2413 +
14	1845.98Y2114 +	1845.98Y2214 +	1845.98Y2314 +	1845.98Y2414 +
15	1845.98Y2115 +	1845.98Y2215 +	1845.98Y2315 +	1845.98Y2415 +
16	1845.98Y2116 +	1845.98Y2216 +	1845.98Y2316 +	1845.98Y2416 +
17	1845.98Y2117 +	1845.98Y2217 +	1845.98Y2317 +	1845.98Y2417 +
18	1845.98Y2118 +	1845.98Y2218 +	1845.98Y2318 +	1845.98Y2418 +
19	1845.98Y2119 +	1845.98Y2219 +	1845.98Y2319 +	1845.98Y2419 +
20	1845.98Y2120 +	1845.98Y2220 +	1845.98Y2320 +	1845.98Y2420 +
21	1845.98Y2121 +	1845.98Y2221 +	1845.98Y2321 +	1845.98Y2421 +
22	1845.98Y2122 +	1845.98Y2222 +	1845.98Y2322 +	1845.98Y2422 +
23	1845.98Y2123 +	1845.98Y2223 +	1845.98Y2323 +	1845.98Y2423 +
24	1845.98Y2124 +	1845.98Y2224 +	1845.98Y2324 +	1845.98Y2424 +
25	1845.98Y2125 +	1845.98Y2225 +	1845.98Y2325 +	1845.98Y2425 +
26	1845.98Y2126 +	1845.98Y2226 +	1845.98Y2326 +	1845.98Y2426 +
27	1845.98Y2127 +	1845.98Y2227 +	1845.98Y2327 +	1845.98Y2427 +
28	1845.98Y2128 +	1845.98Y2228 +	1845.98Y2328 +	1845.98Y2428 +
29	1845.98Y2129 +	1845.98Y2229 +	1845.98Y2329 +	1845.98Y2429 +
30	1845.98Y2130 +	1845.98Y2230 +	1845.98Y2330 +	1845.98Y2430 +

## COSTO DE V2

2

**6.92**

## Lote

Día	1	2	3	4
1	6.92V211 +	6.92V221 +	6.92V231 +	6.92V241 +
2	6.92V212 +	6.92V222 +	6.92V232 +	6.92V242 +
3	6.92V213 +	6.92V223 +	6.92V233 +	6.92V243 +
4	6.92V214 +	6.92V224 +	6.92V234 +	6.92V244 +
5	6.92V215 +	6.92V225 +	6.92V235 +	6.92V245 +
6	6.92V216 +	6.92V226 +	6.92V236 +	6.92V246 +
7	6.92V217 +	6.92V227 +	6.92V237 +	6.92V247 +
8	6.92V218 +	6.92V228 +	6.92V238 +	6.92V248 +
9	6.92V219 +	6.92V229 +	6.92V239 +	6.92V249 +
10	6.92V2110 +	6.92V2210 +	6.92V2310 +	6.92V2410 +
11	6.92V2111 +	6.92V2211 +	6.92V2311 +	6.92V2411 +
12	6.92V2112 +	6.92V2212 +	6.92V2312 +	6.92V2412 +
13	6.92V2113 +	6.92V2213 +	6.92V2313 +	6.92V2413 +
14	6.92V2114 +	6.92V2214 +	6.92V2314 +	6.92V2414 +
15	6.92V2115 +	6.92V2215 +	6.92V2315 +	6.92V2415 +
16	6.92V2116 +	6.92V2216 +	6.92V2316 +	6.92V2416 +
17	6.92V2117 +	6.92V2217 +	6.92V2317 +	6.92V2417 +
18	6.92V2118 +	6.92V2218 +	6.92V2318 +	6.92V2418 +
19	6.92V2119 +	6.92V2219 +	6.92V2319 +	6.92V2419 +
20	6.92V2120 +	6.92V2220 +	6.92V2320 +	6.92V2420 +
21	6.92V2121 +	6.92V2221 +	6.92V2321 +	6.92V2421 +
22	6.92V2122 +	6.92V2222 +	6.92V2322 +	6.92V2422 +
23	6.92V2123 +	6.92V2223 +	6.92V2323 +	6.92V2423 +
24	6.92V2124 +	6.92V2224 +	6.92V2324 +	6.92V2424 +
25	6.92V2125 +	6.92V2225 +	6.92V2325 +	6.92V2425 +
26	6.92V2126 +	6.92V2226 +	6.92V2326 +	6.92V2426 +
27	6.92V2127 +	6.92V2227 +	6.92V2327 +	6.92V2427 +
28	6.92V2128 +	6.92V2228 +	6.92V2328 +	6.92V2428 +
29	6.92V2129 +	6.92V2229 +	6.92V2329 +	6.92V2429 +
30	6.92V2130 +	6.92V2230 +	6.92V2330 +	6.92V2430 +

## COSTO DE X3

3

**709.58**

## Lote

Día	1	2	3	4
1	709.58X311 +	709.58X321 +	709.58X331 +	709.58X341 +
2	709.58X312 +	709.58X322 +	709.58X332 +	709.58X342 +
3	709.58X313 +	709.58X323 +	709.58X333 +	709.58X343 +
4	709.58X314 +	709.58X324 +	709.58X334 +	709.58X344 +
5	709.58X315 +	709.58X325 +	709.58X335 +	709.58X345 +
6	709.58X316 +	709.58X326 +	709.58X336 +	709.58X346 +
7	709.58X317 +	709.58X327 +	709.58X337 +	709.58X347 +
8	709.58X318 +	709.58X328 +	709.58X338 +	709.58X348 +
9	709.58X319 +	709.58X329 +	709.58X339 +	709.58X349 +
10	709.58X3110 +	709.58X3210 +	709.58X3310 +	709.58X3410 +
11	709.58X3111 +	709.58X3211 +	709.58X3311 +	709.58X3411 +
12	709.58X3112 +	709.58X3212 +	709.58X3312 +	709.58X3412 +
13	709.58X3113 +	709.58X3213 +	709.58X3313 +	709.58X3413 +
14	709.58X3114 +	709.58X3214 +	709.58X3314 +	709.58X3414 +
15	709.58X3115 +	709.58X3215 +	709.58X3315 +	709.58X3415 +
16	709.58X3116 +	709.58X3216 +	709.58X3316 +	709.58X3416 +
17	709.58X3117 +	709.58X3217 +	709.58X3317 +	709.58X3417 +
18	709.58X3118 +	709.58X3218 +	709.58X3318 +	709.58X3418 +
19	709.58X3119 +	709.58X3219 +	709.58X3319 +	709.58X3419 +
20	709.58X3120 +	709.58X3220 +	709.58X3320 +	709.58X3420 +
21	709.58X3121 +	709.58X3221 +	709.58X3321 +	709.58X3421 +
22	709.58X3122 +	709.58X3222 +	709.58X3322 +	709.58X3422 +
23	709.58X3123 +	709.58X3223 +	709.58X3323 +	709.58X3423 +
24	709.58X3124 +	709.58X3224 +	709.58X3324 +	709.58X3424 +
25	709.58X3125 +	709.58X3225 +	709.58X3325 +	709.58X3425 +
26	709.58X3126 +	709.58X3226 +	709.58X3326 +	709.58X3426 +
27	709.58X3127 +	709.58X3227 +	709.58X3327 +	709.58X3427 +
28	709.58X3128 +	709.58X3228 +	709.58X3328 +	709.58X3428 +
29	709.58X3129 +	709.58X3229 +	709.58X3329 +	709.58X3429 +
30	709.58X3130 +	709.58X3230 +	709.58X3330 +	709.58X3430 +

## COSTO DE Y3

3

**4039.36**

## Lote

Día	1	2	3	4
1	4039.36Y311 +	4039.36Y321 +	4039.36Y331 +	4039.36Y341 +
2	4039.36Y312 +	4039.36Y322 +	4039.36Y332 +	4039.36Y342 +
3	4039.36Y313 +	4039.36Y323 +	4039.36Y333 +	4039.36Y343 +
4	4039.36Y314 +	4039.36Y324 +	4039.36Y334 +	4039.36Y344 +
5	4039.36Y315 +	4039.36Y325 +	4039.36Y335 +	4039.36Y345 +
6	4039.36Y316 +	4039.36Y326 +	4039.36Y336 +	4039.36Y346 +

MIN

345.49X111 + 345.49X121 + 345.49X131 + 345.49X141 + 345.49X211 + 345.49X221 + 345.49X231 +  
345.49X112 + 345.49X122 + 345.49X132 + 345.49X142 + 345.49X212 + 345.49X222 + 345.49X232 +  
345.49X113 + 345.49X123 + 345.49X133 + 345.49X143 + 345.49X213 + 345.49X223 + 345.49X233 +  
345.49X114 + 345.49X124 + 345.49X134 + 345.49X144 + 345.49X214 + 345.49X224 + 345.49X234 +  
345.49X115 + 345.49X125 + 345.49X135 + 345.49X145 + 345.49X215 + 345.49X225 + 345.49X235 +  
345.49X116 + 345.49X126 + 345.49X136 + 345.49X146 + 345.49X216 + 345.49X226 + 345.49X236 +  
345.49X117 + 345.49X127 + 345.49X137 + 345.49X147 + 345.49X217 + 345.49X227 + 345.49X237 +  
345.49X118 + 345.49X128 + 345.49X138 + 345.49X148 + 345.49X218 + 345.49X228 + 345.49X238 +  
345.49X119 + 345.49X129 + 345.49X139 + 345.49X149 + 345.49X219 + 345.49X229 + 345.49X239 +  
345.49X1110 345.49X1210 345.49X1310 345.49X1410 345.49X2110 345.49X2210 345.49X2310  
345.49X1111 345.49X1211 345.49X1311 345.49X1411 345.49X2111 345.49X2211 345.49X2311  
345.49X1112 345.49X1212 345.49X1312 345.49X1412 345.49X2112 345.49X2212 345.49X2312  
345.49X1113 345.49X1213 345.49X1313 345.49X1413 345.49X2113 345.49X2213 345.49X2313  
345.49X1114 345.49X1214 345.49X1314 345.49X1414 345.49X2114 345.49X2214 345.49X2314  
345.49X1115 345.49X1215 345.49X1315 345.49X1415 345.49X2115 345.49X2215 345.49X2315  
345.49X1116 345.49X1216 345.49X1316 345.49X1416 345.49X2116 345.49X2216 345.49X2316  
345.49X1117 345.49X1217 345.49X1317 345.49X1417 345.49X2117 345.49X2217 345.49X2317  
345.49X1118 345.49X1218 345.49X1318 345.49X1418 345.49X2118 345.49X2218 345.49X2318  
345.49X1119 345.49X1219 345.49X1319 345.49X1419 345.49X2119 345.49X2219 345.49X2319  
345.49X1120 345.49X1220 345.49X1320 345.49X1420 345.49X2120 345.49X2220 345.49X2320  
345.49X1121 345.49X1221 345.49X1321 345.49X1421 345.49X2121 345.49X2221 345.49X2321  
345.49X1122 345.49X1222 345.49X1322 345.49X1422 345.49X2122 345.49X2222 345.49X2322  
345.49X1123 345.49X1223 345.49X1323 345.49X1423 345.49X2123 345.49X2223 345.49X2323  
345.49X1124 345.49X1224 345.49X1324 345.49X1424 345.49X2124 345.49X2224 345.49X2324  
345.49X1125 345.49X1225 345.49X1325 345.49X1425 345.49X2125 345.49X2225 345.49X2325  
345.49X1126 345.49X1226 345.49X1326 345.49X1426 345.49X2126 345.49X2226 345.49X2326  
345.49X1127 345.49X1227 345.49X1327 345.49X1427 345.49X2127 345.49X2227 345.49X2327  
345.49X1128 345.49X1228 345.49X1328 345.49X1428 345.49X2128 345.49X2228 345.49X2328  
345.49X1129 345.49X1229 345.49X1329 345.49X1429 345.49X2129 345.49X2229 345.49X2329  
345.49X1130 345.49X1230 345.49X1330 345.49X1430 345.49X2130 345.49X2230 345.49X2330  
1845.98Y111 · 1845.98Y121 · 1845.98Y131 · 1845.98Y141 · 1845.98Y211 · 1845.98Y221 · 1845.98Y231 ·  
1845.98Y112 · 1845.98Y122 · 1845.98Y132 · 1845.98Y142 · 1845.98Y212 · 1845.98Y222 · 1845.98Y232 ·  
1845.98Y113 · 1845.98Y123 · 1845.98Y133 · 1845.98Y143 · 1845.98Y213 · 1845.98Y223 · 1845.98Y233 ·  
1845.98Y114 · 1845.98Y124 · 1845.98Y134 · 1845.98Y144 · 1845.98Y214 · 1845.98Y224 · 1845.98Y234 ·  
1845.98Y115 · 1845.98Y125 · 1845.98Y135 · 1845.98Y145 · 1845.98Y215 · 1845.98Y225 · 1845.98Y235 ·  
1845.98Y116 · 1845.98Y126 · 1845.98Y136 · 1845.98Y146 · 1845.98Y216 · 1845.98Y226 · 1845.98Y236 ·  
1845.98Y117 · 1845.98Y127 · 1845.98Y137 · 1845.98Y147 · 1845.98Y217 · 1845.98Y227 · 1845.98Y237 ·  
1845.98Y118 · 1845.98Y128 · 1845.98Y138 · 1845.98Y148 · 1845.98Y218 · 1845.98Y228 · 1845.98Y238 ·  
1845.98Y119 · 1845.98Y129 · 1845.98Y139 · 1845.98Y149 · 1845.98Y219 · 1845.98Y229 · 1845.98Y239 ·  
1845.98Y1110 1845.98Y1210 1845.98Y1310 1845.98Y1410 1845.98Y2110 1845.98Y2210 1845.98Y2310  
1845.98Y1111 1845.98Y1211 1845.98Y1311 1845.98Y1411 1845.98Y2111 1845.98Y2211 1845.98Y2311  
1845.98Y1112 1845.98Y1212 1845.98Y1312 1845.98Y1412 1845.98Y2112 1845.98Y2212 1845.98Y2312  
1845.98Y1113 1845.98Y1213 1845.98Y1313 1845.98Y1413 1845.98Y2113 1845.98Y2213 1845.98Y2313  
1845.98Y1114 1845.98Y1214 1845.98Y1314 1845.98Y1414 1845.98Y2114 1845.98Y2214 1845.98Y2314  
1845.98Y1115 1845.98Y1215 1845.98Y1315 1845.98Y1415 1845.98Y2115 1845.98Y2215 1845.98Y2315  
1845.98Y1116 1845.98Y1216 1845.98Y1316 1845.98Y1416 1845.98Y2116 1845.98Y2216 1845.98Y2316  
1845.98Y1117 1845.98Y1217 1845.98Y1317 1845.98Y1417 1845.98Y2117 1845.98Y2217 1845.98Y2317  
1845.98Y1118 1845.98Y1218 1845.98Y1318 1845.98Y1418 1845.98Y2118 1845.98Y2218 1845.98Y2318

1845.98Y111 + 1845.98Y121 + 1845.98Y131 + 1845.98Y141 + 1845.98Y211 + 1845.98Y221 + 1845.98Y231 +  
 1845.98Y112 + 1845.98Y122 + 1845.98Y132 + 1845.98Y142 + 1845.98Y212 + 1845.98Y222 + 1845.98Y232 +  
 1845.98Y1121 1845.98Y1221 1845.98Y1321 1845.98Y1421 1845.98Y2121 1845.98Y2221 1845.98Y2321  
 1845.98Y1122 1845.98Y1222 1845.98Y1322 1845.98Y1422 1845.98Y2122 1845.98Y2222 1845.98Y2322  
 1845.98Y1123 1845.98Y1223 1845.98Y1323 1845.98Y1423 1845.98Y2123 1845.98Y2223 1845.98Y2323  
 1845.98Y1124 1845.98Y1224 1845.98Y1324 1845.98Y1424 1845.98Y2124 1845.98Y2224 1845.98Y2324  
 1845.98Y1125 1845.98Y1225 1845.98Y1325 1845.98Y1425 1845.98Y2125 1845.98Y2225 1845.98Y2325  
 1845.98Y1126 1845.98Y1226 1845.98Y1326 1845.98Y1426 1845.98Y2126 1845.98Y2226 1845.98Y2326  
 1845.98Y1127 1845.98Y1227 1845.98Y1327 1845.98Y1427 1845.98Y2127 1845.98Y2227 1845.98Y2327  
 1845.98Y1128 1845.98Y1228 1845.98Y1328 1845.98Y1428 1845.98Y2128 1845.98Y2228 1845.98Y2328  
 1845.98Y1129 1845.98Y1229 1845.98Y1329 1845.98Y1429 1845.98Y2129 1845.98Y2229 1845.98Y2329  
 1845.98Y1130 1845.98Y1230 1845.98Y1330 1845.98Y1430 1845.98Y2130 1845.98Y2230 1845.98Y2330  
 29.12Z111 + 29.12Z121 + 29.12Z131 + 29.12Z141 +  
 29.12Z112 + 29.12Z122 + 29.12Z132 + 29.12Z142 +  
 29.12Z113 + 29.12Z123 + 29.12Z133 + 29.12Z143 +  
 29.12Z114 + 29.12Z124 + 29.12Z134 + 29.12Z144 +  
 29.12Z115 + 29.12Z125 + 29.12Z135 + 29.12Z145 +  
 29.12Z116 + 29.12Z126 + 29.12Z136 + 29.12Z146 +  
 29.12Z117 + 29.12Z127 + 29.12Z137 + 29.12Z147 +  
 29.12Z118 + 29.12Z128 + 29.12Z138 + 29.12Z148 +  
 29.12Z119 + 29.12Z129 + 29.12Z139 + 29.12Z149 +  
 29.12Z1110 + 29.12Z1210 + 29.12Z1310 + 29.12Z1410 +  
 29.12Z1111 + 29.12Z1211 + 29.12Z1311 + 29.12Z1411 +  
 29.12Z1112 + 29.12Z1212 + 29.12Z1312 + 29.12Z1412 +  
 29.12Z1113 + 29.12Z1213 + 29.12Z1313 + 29.12Z1413 +  
 29.12Z1114 + 29.12Z1214 + 29.12Z1314 + 29.12Z1414 +  
 29.12Z1115 + 29.12Z1215 + 29.12Z1315 + 29.12Z1415 +  
 29.12Z1116 + 29.12Z1216 + 29.12Z1316 + 29.12Z1416 +  
 29.12Z1117 + 29.12Z1217 + 29.12Z1317 + 29.12Z1417 +  
 29.12Z1118 + 29.12Z1218 + 29.12Z1318 + 29.12Z1418 +  
 29.12Z1119 + 29.12Z1219 + 29.12Z1319 + 29.12Z1419 +  
 29.12Z1120 + 29.12Z1220 + 29.12Z1320 + 29.12Z1420 +  
 29.12Z1121 + 29.12Z1221 + 29.12Z1321 + 29.12Z1421 +  
 29.12Z1122 + 29.12Z1222 + 29.12Z1322 + 29.12Z1422 +  
 29.12Z1123 + 29.12Z1223 + 29.12Z1323 + 29.12Z1423 +  
 29.12Z1124 + 29.12Z1224 + 29.12Z1324 + 29.12Z1424 +  
 29.12Z1125 + 29.12Z1225 + 29.12Z1325 + 29.12Z1425 +  
 29.12Z1126 + 29.12Z1226 + 29.12Z1326 + 29.12Z1426 +  
 29.12Z1127 + 29.12Z1227 + 29.12Z1327 + 29.12Z1427 +  
 29.12Z1128 + 29.12Z1228 + 29.12Z1328 + 29.12Z1428 +  
 29.12Z1129 + 29.12Z1229 + 29.12Z1329 + 29.12Z1429 +  
 29.12Z1130 + 29.12Z1230 + 29.12Z1330 + 29.12Z1430 +  
 495.35V111 + 495.35V121 + 495.35V131 + 495.35V141 + 6.92V211 + 6.92V221 + 6.92V231 +  
 495.35V112 + 495.35V122 + 495.35V132 + 495.35V142 + 6.92V212 + 6.92V222 + 6.92V232 +  
 495.35V113 + 495.35V123 + 495.35V133 + 495.35V143 + 6.92V213 + 6.92V223 + 6.92V233 +  
 495.35V114 + 495.35V124 + 495.35V134 + 495.35V144 + 6.92V214 + 6.92V224 + 6.92V234 +  
 495.35V115 + 495.35V125 + 495.35V135 + 495.35V145 + 6.92V215 + 6.92V225 + 6.92V235 +  
 495.35V116 + 495.35V126 + 495.35V136 + 495.35V146 + 6.92V216 + 6.92V226 + 6.92V236 +  
 495.35V117 + 495.35V127 + 495.35V137 + 495.35V147 + 6.92V217 + 6.92V227 + 6.92V237 +  
 495.35V118 + 495.35V128 + 495.35V138 + 495.35V148 + 6.92V218 + 6.92V228 + 6.92V238 +

495.35V119 + 495.35V129 + 495.35V139 + 495.35V149 + 6.92V219 + 6.92V229 + 6.92V239 +  
 495.35V1110 495.35V1210 495.35V1310 495.35V1410 6.92V2110 + 6.92V2210 + 6.92V2310 +  
 495.35V1111 495.35V1211 495.35V1311 495.35V1411 6.92V2111 + 6.92V2211 + 6.92V2311 +  
 495.35V1112 495.35V1212 495.35V1312 495.35V1412 6.92V2112 + 6.92V2212 + 6.92V2312 +  
 495.35V1113 495.35V1213 495.35V1313 495.35V1413 6.92V2113 + 6.92V2213 + 6.92V2313 +  
 495.35V1114 495.35V1214 495.35V1314 495.35V1414 6.92V2114 + 6.92V2214 + 6.92V2314 +  
 495.35V1115 495.35V1215 495.35V1315 495.35V1415 6.92V2115 + 6.92V2215 + 6.92V2315 +  
 495.35V1116 495.35V1216 495.35V1316 495.35V1416 6.92V2116 + 6.92V2216 + 6.92V2316 +  
 495.35V1117 495.35V1217 495.35V1317 495.35V1417 6.92V2117 + 6.92V2217 + 6.92V2317 +  
 495.35V1118 495.35V1218 495.35V1318 495.35V1418 6.92V2118 + 6.92V2218 + 6.92V2318 +  
 495.35V1119 495.35V1219 495.35V1319 495.35V1419 6.92V2119 + 6.92V2219 + 6.92V2319 +  
 495.35V1120 495.35V1220 495.35V1320 495.35V1420 6.92V2120 + 6.92V2220 + 6.92V2320 +  
 495.35V1121 495.35V1221 495.35V1321 495.35V1421 6.92V2121 + 6.92V2221 + 6.92V2321 +  
 495.35V1122 495.35V1222 495.35V1322 495.35V1422 6.92V2122 + 6.92V2222 + 6.92V2322 +  
 495.35V1123 495.35V1223 495.35V1323 495.35V1423 6.92V2123 + 6.92V2223 + 6.92V2323 +  
 495.35V1124 495.35V1224 495.35V1324 495.35V1424 6.92V2124 + 6.92V2224 + 6.92V2324 +  
 495.35V1125 495.35V1225 495.35V1325 495.35V1425 6.92V2125 + 6.92V2225 + 6.92V2325 +  
 495.35V1126 495.35V1226 495.35V1326 495.35V1426 6.92V2126 + 6.92V2226 + 6.92V2326 +  
 495.35V1127 495.35V1227 495.35V1327 495.35V1427 6.92V2127 + 6.92V2227 + 6.92V2327 +  
 495.35V1128 495.35V1228 495.35V1328 495.35V1428 6.92V2128 + 6.92V2228 + 6.92V2328 +  
 495.35V1129 495.35V1229 495.35V1329 495.35V1429 6.92V2129 + 6.92V2229 + 6.92V2329 +  
 495.35V1130 495.35V1230 495.35V1330 495.35V1430 6.92V2130 + 6.92V2230 + 6.92V2330 +

ST

X111 +	X211 +	X311 +	X411 +	Y111 +	Y211 +	Y311 +
X121 +	X221 +	X321 +	X421 +	Y121 +	Y221 +	Y321 +
X131 +	X231 +	X331 +	X431 +	Y131 +	Y231 +	Y331 +
X141 +	X241 +	X341 +	X441 +	Y141 +	Y241 +	Y341 +
X112 +	X212 +	X312 +	X412 +	Y112 +	Y212 +	Y312 +
X122 +	X222 +	X322 +	X422 +	Y122 +	Y222 +	Y322 +
X132 +	X232 +	X332 +	X432 +	Y132 +	Y232 +	Y332 +
X142 +	X242 +	X342 +	X442 +	Y142 +	Y242 +	Y342 +
X113 +	X213 +	X313 +	X413 +	Y113 +	Y213 +	Y313 +
X123 +	X223 +	X323 +	X423 +	Y123 +	Y223 +	Y323 +
X133 +	X233 +	X333 +	X433 +	Y133 +	Y233 +	Y333 +
X143 +	X243 +	X343 +	X443 +	Y143 +	Y243 +	Y343 +
X114 +	X214 +	X314 +	X414 +	Y114 +	Y214 +	Y314 +
X124 +	X224 +	X324 +	X424 +	Y124 +	Y224 +	Y324 +
X134 +	X234 +	X334 +	X434 +	Y134 +	Y234 +	Y334 +
X144 +	X244 +	X344 +	X444 +	Y144 +	Y244 +	Y344 +
X115 +	X215 +	X315 +	X415 +	Y115 +	Y215 +	Y315 +
X125 +	X225 +	X325 +	X425 +	Y125 +	Y225 +	Y325 +
X135 +	X235 +	X335 +	X435 +	Y135 +	Y235 +	Y335 +
X145 +	X245 +	X345 +	X445 +	Y145 +	Y245 +	Y345 +
X116 +	X216 +	X316 +	X416 +	Y116 +	Y216 +	Y316 +
X126 +	X226 +	X326 +	X426 +	Y126 +	Y226 +	Y326 +
X136 +	X236 +	X336 +	X436 +	Y136 +	Y236 +	Y336 +
X146 +	X246 +	X346 +	X446 +	Y146 +	Y246 +	Y346 +

X117 +	X217 +	X317 +	X417 +	Y117 +	Y217 +	Y317 +
X127 +	X227 +	X327 +	X427 +	Y127 +	Y227 +	Y327 +
X137 +	X237 +	X337 +	X437 +	Y137 +	Y237 +	Y337 +
X147 +	X247 +	X347 +	X447 +	Y147 +	Y247 +	Y347 +
X118 +	X218 +	X318 +	X418 +	Y118 +	Y218 +	Y318 +
X128 +	X228 +	X328 +	X428 +	Y128 +	Y228 +	Y328 +
X138 +	X238 +	X338 +	X438 +	Y138 +	Y238 +	Y338 +
X148 +	X248 +	X348 +	X448 +	Y148 +	Y248 +	Y348 +
X119 +	X219 +	X319 +	X419 +	Y119 +	Y219 +	Y319 +
X129 +	X229 +	X329 +	X429 +	Y129 +	Y229 +	Y329 +
X139 +	X239 +	X339 +	X439 +	Y139 +	Y239 +	Y339 +
X149 +	X249 +	X349 +	X449 +	Y149 +	Y249 +	Y349 +
X1110 +	X2110 +	X3110 +	X4110 +	Y1110 +	Y2110 +	Y3110 +
X1210 +	X2210 +	X3210 +	X4210 +	Y1210 +	Y2210 +	Y3210 +
X1310 +	X2310 +	X3310 +	X4310 +	Y1310 +	Y2310 +	Y3310 +
X1410 +	X2410 +	X3410 +	X4410 +	Y1410 +	Y2410 +	Y3410 +
X1111 +	X2111 +	X3111 +	X4111 +	Y1111 +	Y2111 +	Y3111 +
X1211 +	X2211 +	X3211 +	X4211 +	Y1211 +	Y2211 +	Y3211 +
X1311 +	X2311 +	X3311 +	X4311 +	Y1311 +	Y2311 +	Y3311 +
X1411 +	X2411 +	X3411 +	X4411 +	Y1411 +	Y2411 +	Y3411 +
X1112 +	X2112 +	X3112 +	X4112 +	Y1112 +	Y2112 +	Y3112 +
X1212 +	X2212 +	X3212 +	X4212 +	Y1212 +	Y2212 +	Y3212 +
X1312 +	X2312 +	X3312 +	X4312 +	Y1312 +	Y2312 +	Y3312 +
X1412 +	X2412 +	X3412 +	X4412 +	Y1412 +	Y2412 +	Y3412 +
X1113 +	X2113 +	X3113 +	X4113 +	Y1113 +	Y2113 +	Y3113 +
X1213 +	X2213 +	X3213 +	X4213 +	Y1213 +	Y2213 +	Y3213 +
X1313 +	X2313 +	X3313 +	X4313 +	Y1313 +	Y2313 +	Y3313 +
X1413 +	X2413 +	X3413 +	X4413 +	Y1413 +	Y2413 +	Y3413 +
X1114 +	X2114 +	X3114 +	X4114 +	Y1114 +	Y2114 +	Y3114 +
X1214 +	X2214 +	X3214 +	X4214 +	Y1214 +	Y2214 +	Y3214 +
X1314 +	X2314 +	X3314 +	X4314 +	Y1314 +	Y2314 +	Y3314 +
X1414 +	X2414 +	X3414 +	X4414 +	Y1414 +	Y2414 +	Y3414 +
X1115 +	X2115 +	X3115 +	X4115 +	Y1115 +	Y2115 +	Y3115 +
X1215 +	X2215 +	X3215 +	X4215 +	Y1215 +	Y2215 +	Y3215 +
X1315 +	X2315 +	X3315 +	X4315 +	Y1315 +	Y2315 +	Y3315 +
X1415 +	X2415 +	X3415 +	X4415 +	Y1415 +	Y2415 +	Y3415 +
X1116 +	X2116 +	X3116 +	X4116 +	Y1116 +	Y2116 +	Y3116 +
X1216 +	X2216 +	X3216 +	X4216 +	Y1216 +	Y2216 +	Y3216 +
X1316 +	X2316 +	X3316 +	X4316 +	Y1316 +	Y2316 +	Y3316 +
X1416 +	X2416 +	X3416 +	X4416 +	Y1416 +	Y2416 +	Y3416 +
X1117 +	X2117 +	X3117 +	X4117 +	Y1117 +	Y2117 +	Y3117 +
X1217 +	X2217 +	X3217 +	X4217 +	Y1217 +	Y2217 +	Y3217 +
X1317 +	X2317 +	X3317 +	X4317 +	Y1317 +	Y2317 +	Y3317 +
X1417 +	X2417 +	X3417 +	X4417 +	Y1417 +	Y2417 +	Y3417 +
X1118 +	X2118 +	X3118 +	X4118 +	Y1118 +	Y2118 +	Y3118 +
X1218 +	X2218 +	X3218 +	X4218 +	Y1218 +	Y2218 +	Y3218 +
X1318 +	X2318 +	X3318 +	X4318 +	Y1318 +	Y2318 +	Y3318 +
X1418 +	X2418 +	X3418 +	X4418 +	Y1418 +	Y2418 +	Y3418 +
X1119 +	X2119 +	X3119 +	X4119 +	Y1119 +	Y2119 +	Y3119 +
X1219 +	X2219 +	X3219 +	X4219 +	Y1219 +	Y2219 +	Y3219 +

X1319 +	X2319 +	X3319 +	X4319 +	Y1319 +	Y2319 +	Y3319 +
X1419 +	X2419 +	X3419 +	X4419 +	Y1419 +	Y2419 +	Y3419 +
X1120 +	X2120 +	X3120 +	X4120 +	Y1120 +	Y2120 +	Y3120 +
X1220 +	X2220 +	X3220 +	X4220 +	Y1220 +	Y2220 +	Y3220 +
X1320 +	X2320 +	X3320 +	X4320 +	Y1320 +	Y2320 +	Y3320 +
X1420 +	X2420 +	X3420 +	X4420 +	Y1420 +	Y2420 +	Y3420 +
X1121 +	X2121 +	X3121 +	X4121 +	Y1121 +	Y2121 +	Y3121 +
X1221 +	X2221 +	X3221 +	X4221 +	Y1221 +	Y2221 +	Y3221 +
X1321 +	X2321 +	X3321 +	X4321 +	Y1321 +	Y2321 +	Y3321 +
X1421 +	X2421 +	X3421 +	X4421 +	Y1421 +	Y2421 +	Y3421 +
X1122 +	X2122 +	X3122 +	X4122 +	Y1122 +	Y2122 +	Y3122 +
X1222 +	X2222 +	X3222 +	X4222 +	Y1222 +	Y2222 +	Y3222 +
X1322 +	X2322 +	X3322 +	X4322 +	Y1322 +	Y2322 +	Y3322 +
X1422 +	X2422 +	X3422 +	X4422 +	Y1422 +	Y2422 +	Y3422 +
X1123 +	X2123 +	X3123 +	X4123 +	Y1123 +	Y2123 +	Y3123 +
X1223 +	X2223 +	X3223 +	X4223 +	Y1223 +	Y2223 +	Y3223 +
X1323 +	X2323 +	X3323 +	X4323 +	Y1323 +	Y2323 +	Y3323 +
X1423 +	X2423 +	X3423 +	X4423 +	Y1423 +	Y2423 +	Y3423 +
X1124 +	X2124 +	X3124 +	X4124 +	Y1124 +	Y2124 +	Y3124 +
X1224 +	X2224 +	X3224 +	X4224 +	Y1224 +	Y2224 +	Y3224 +
X1324 +	X2324 +	X3324 +	X4324 +	Y1324 +	Y2324 +	Y3324 +
X1424 +	X2424 +	X3424 +	X4424 +	Y1424 +	Y2424 +	Y3424 +
X1125 +	X2125 +	X3125 +	X4125 +	Y1125 +	Y2125 +	Y3125 +
X1225 +	X2225 +	X3225 +	X4225 +	Y1225 +	Y2225 +	Y3225 +
X1325 +	X2325 +	X3325 +	X4325 +	Y1325 +	Y2325 +	Y3325 +
X1425 +	X2425 +	X3425 +	X4425 +	Y1425 +	Y2425 +	Y3425 +
X1126 +	X2126 +	X3126 +	X4126 +	Y1126 +	Y2126 +	Y3126 +
X1226 +	X2226 +	X3226 +	X4226 +	Y1226 +	Y2226 +	Y3226 +
X1326 +	X2326 +	X3326 +	X4326 +	Y1326 +	Y2326 +	Y3326 +
X1426 +	X2426 +	X3426 +	X4426 +	Y1426 +	Y2426 +	Y3426 +
X1127 +	X2127 +	X3127 +	X4127 +	Y1127 +	Y2127 +	Y3127 +
X1227 +	X2227 +	X3227 +	X4227 +	Y1227 +	Y2227 +	Y3227 +
X1327 +	X2327 +	X3327 +	X4327 +	Y1327 +	Y2327 +	Y3327 +
X1427 +	X2427 +	X3427 +	X4427 +	Y1427 +	Y2427 +	Y3427 +
X1128 +	X2128 +	X3128 +	X4128 +	Y1128 +	Y2128 +	Y3128 +
X1228 +	X2228 +	X3228 +	X4228 +	Y1228 +	Y2228 +	Y3228 +
X1328 +	X2328 +	X3328 +	X4328 +	Y1328 +	Y2328 +	Y3328 +
X1428 +	X2428 +	X3428 +	X4428 +	Y1428 +	Y2428 +	Y3428 +
X1129 +	X2129 +	X3129 +	X4129 +	Y1129 +	Y2129 +	Y3129 +
X1229 +	X2229 +	X3229 +	X4229 +	Y1229 +	Y2229 +	Y3229 +
X1329 +	X2329 +	X3329 +	X4329 +	Y1329 +	Y2329 +	Y3329 +
X1429 +	X2429 +	X3429 +	X4429 +	Y1429 +	Y2429 +	Y3429 +
X1130 +	X2130 +	X3130 +	X4130 +	Y1130 +	Y2130 +	Y3130 +
X1230 +	X2230 +	X3230 +	X4230 +	Y1230 +	Y2230 +	Y3230 +
X1330 +	X2330 +	X3330 +	X4330 +	Y1330 +	Y2330 +	Y3330 +
X1430 +	X2430 +	X3430 +	X4430 +	Y1430 +	Y2430 +	Y3430 +

N11	<	130
N21	<	130
N31	<	130

Global optimal solution found.

Objective value: 0.1978859E+08  
Total solver iterations: 392

Variable	Value	Reduced Cost
X111	10.75501	0.000000
X121	10.75501	0.000000
X131	10.75501	0.000000
X141	10.75501	0.000000
X211	3.961024	0.000000
X221	3.961024	0.000000
X231	3.961024	0.000000
X241	3.961024	0.000000
X311	0.1724660	0.000000
X321	0.1724660	0.000000
X331	0.1724660	0.000000
X341	0.1724660	0.000000
X411	1.705498	0.000000
X421	1.705498	0.000000
X431	1.705498	0.000000
X441	1.705498	0.000000
X112	10.75501	0.000000
X122	10.75501	0.000000
X132	10.75501	0.000000
X142	10.75501	0.000000
X212	3.961024	0.000000
X222	3.961024	0.000000
X232	3.961024	0.000000
X242	3.961024	0.000000
X312	0.1724660	0.000000
X322	0.1724660	0.000000
X332	0.1724660	0.000000
X342	0.1724660	0.000000
X412	1.705498	0.000000
X422	1.705498	0.000000
X432	1.705498	0.000000
X442	1.705498	0.000000
X113	10.75501	0.000000
X123	10.75501	0.000000
X133	10.75501	0.000000
X143	10.75501	0.000000
X213	3.961024	0.000000
X223	3.961024	0.000000
X233	3.961024	0.000000
X243	3.961024	0.000000
X313	0.1724660	0.000000
X323	0.1724660	0.000000
X333	0.1724660	0.000000
X343	0.1724660	0.000000

X413	1.705498	0.000000
X423	1.705498	0.000000
X433	1.705498	0.000000
X443	1.705498	0.000000
X114	10.75501	0.000000
X124	10.75501	0.000000
X134	10.75501	0.000000
X144	10.75501	0.000000
X214	3.961024	0.000000
X224	3.961024	0.000000
X234	3.961024	0.000000
X244	3.961024	0.000000
X314	0.1724660	0.000000
X324	0.1724660	0.000000
X334	0.1724660	0.000000
X344	0.1724660	0.000000
X414	1.705498	0.000000
X424	1.705498	0.000000
X434	1.705498	0.000000
X444	1.705498	0.000000
X115	10.95250	0.000000
X125	10.95250	0.000000
X135	10.95250	0.000000
X145	10.95250	0.000000
X215	4.033756	0.000000
X225	4.033756	0.000000
X235	4.033756	0.000000
X245	4.033756	0.000000
X315	0.1756329	0.000000
X325	0.1756329	0.000000
X335	0.1756329	0.000000
X345	0.1756329	0.000000
X415	1.736814	0.000000
X425	1.736814	0.000000
X435	1.736814	0.000000
X445	1.736814	0.000000
X116	12.04775	0.000000
X126	12.04775	0.000000
X136	12.04775	0.000000
X146	12.04775	0.000000
X216	4.437132	0.000000
X226	4.437132	0.000000
X236	4.437132	0.000000
X246	4.437132	0.000000
X316	0.1931962	0.000000
X326	0.1931962	0.000000
X336	0.1931962	0.000000
X346	0.1931962	0.000000
X416	1.910495	0.000000
X426	1.910495	0.000000

X436	1.910495	0.000000
X446	1.910495	0.000000
X117	12.04775	0.000000
X127	12.04775	0.000000
X137	12.04775	0.000000
X147	12.04775	0.000000
X217	4.437132	0.000000
X227	4.437132	0.000000
X237	4.437132	0.000000
X247	4.437132	0.000000
X317	0.1931962	0.000000
X327	0.1931962	0.000000
X337	0.1931962	0.000000
X347	0.1931962	0.000000
X417	1.910495	0.000000
X427	1.910495	0.000000
X437	1.910495	0.000000
X447	1.910495	0.000000
X118	12.04775	0.000000
X128	12.04775	0.000000
X138	12.04775	0.000000
X148	12.04775	0.000000
X218	4.437132	0.000000
X228	4.437132	0.000000
X238	4.437132	0.000000
X248	4.437132	0.000000
X318	0.1931962	0.000000
X328	0.1931962	0.000000
X338	0.1931962	0.000000
X348	0.1931962	0.000000
X418	1.910495	0.000000
X428	1.910495	0.000000
X438	1.910495	0.000000
X448	1.910495	0.000000
X119	12.04775	0.000000
X129	12.04775	0.000000
X139	12.04775	0.000000
X149	12.04775	0.000000
X219	4.437132	0.000000
X229	4.437132	0.000000
X239	4.437132	0.000000
X249	4.437132	0.000000
X319	0.1931962	0.000000
X329	0.1931962	0.000000
X339	0.1931962	0.000000
X349	0.1931962	0.000000
X419	1.910495	0.000000
X429	1.910495	0.000000
X439	1.910495	0.000000
X449	1.910495	0.000000

X1110	12.04775	0.000000
X1210	12.04775	0.000000
X1310	12.04775	0.000000
X1410	12.04775	0.000000
X2110	4.437132	0.000000
X2210	4.437132	0.000000
X2310	4.437132	0.000000
X2410	4.437132	0.000000
X3110	0.1931962	0.000000
X3210	0.1931962	0.000000
X3310	0.1931962	0.000000
X3410	0.1931962	0.000000
X4110	1.910495	0.000000
X4210	1.910495	0.000000
X4310	1.910495	0.000000
X4410	1.910495	0.000000
X1111	14.23824	0.000000
X1211	14.23824	0.000000
X1311	14.23824	0.000000
X1411	14.23824	0.000000
X2111	5.243883	0.000000
X2211	5.243883	0.000000
X2311	5.243883	0.000000
X2411	5.243883	0.000000
X3111	0.2283227	0.000000
X3211	0.2283227	0.000000
X3311	0.2283227	0.000000
X3411	0.2283227	0.000000
X4111	2.257858	0.000000
X4211	2.257858	0.000000
X4311	2.257858	0.000000
X4411	2.257858	0.000000
X1112	14.23824	0.000000
X1212	14.23824	0.000000
X1312	14.23824	0.000000
X1412	14.23824	0.000000
X2112	5.243883	0.000000
X2212	5.243883	0.000000
X2312	5.243883	0.000000
X2412	5.243883	0.000000
X3112	0.2283227	0.000000
X3212	0.2283227	0.000000
X3312	0.2283227	0.000000
X3412	0.2283227	0.000000
X4112	2.257858	0.000000
X4212	2.257858	0.000000
X4312	2.257858	0.000000
X4412	2.257858	0.000000
X1113	14.23824	0.000000
X1213	14.23824	0.000000