

Chemical	Red	Blue	Purple	Green	Red Strobe	White Strobe	Green Strobe
Potassium Perchlorate	68	61	61	-	-	-	-
Ammonium Perchlorate	-	-	-	-	34	-	-
Barium Nitrate	-	-	-	56	-	53	49
Copper Carbonate	-	12	5	-	-	-	-
Strontium Carbonate	13	-	8	-	15	-	-
Sulfur	-	-	-	9	24	23	18
Parlon	-	13	12	14	-	-	-
Hexachlorobenzene	-	-	-	-	5	-	6
Red Gum	14	9	9	3	-	-	-
Mg/Al (-60 mesh)	-	-	-	-	12	12	11
Mg/Al (-200 mesh)	-	-	-	4	-	6	9
Aluminum (12mic., atom.)	-	-	-	9	-	-	-
Dextrin	5	5	5	4	5	5	5
Boric Acid	-	-	-	1	-	0.5	0.5
Potassium Dichromate	0.5	-	-	-	5	2	2
Notes:					(A)	(B & C)	(B & C)
References:		(1)	(1)			(2)	(2)

(A) Do not prime with meal prime, use only red strobe prime.

(B) Adjust strobe rate by using greater or lesser amounts of Mg/Al (200 mesh).

(C) Priming consisted of a very heavy application of meal prime (30-50% of total star weight).

Chemical	Meal Prime	Red Strobe Prime	Willow	Gold Glitter	Soft Silver	Bright Silver	Pearl
Potassium Perchlorate	-	68	-	-	-	-	-
Potassium Nitrate	75	-	64	55	50	64	35
Barium Nitrate	-	-	-	-	10	-	-
Charcoal (air float)	15	18	13	11	10	13	15
Charcoal (80 mesh)	-	-	9	-	-	-	-
Zinc Dust	-	-	-	-	-	-	40
Aluminum (12mic., atom.)	-	-	-	5	-	-	-
Aluminum (50-120 mesh)	-	-	-	-	10	-	-
Titanium (20-40 mesh)	-	-	-	-	-	9	-
Red Gum	-	9	-	-	-	-	-
Sulfur	10	-	9	17	15	9	5
Dextrin	5	4	5	5	5	5	5
Potassium Dichromate	-	1	-	-	-	-	-
Sodium Bicarbonate	-	-	-	7	-	-	-
Notes:	(D)	(D)					3
Notes:				(3)	(4)		3

(D) Can also be mixed with nitrocellulose lacquer for use as a quick drying slurry prime.

## References

(1) T. Shimizu, "Studies on Blue and Purple Flame Compositions Made with Potassium Perchlorate" *Pyrotechnica VI*, (1980).

(2) R. Winokur, Private communication.

(3) T. Fisher, "Glitter Stars without Antimony". *PGI Bulletin* No. 24 (1981).

(4) R. Sheard and others, Private communication.