

SYNTHETIC CRYOLITE (Sodium Hexafluoroaluminate; Na_3AlF_6)

PRINCIPAL USES

To increase the conductivity of the electrolyte during the electrolytic refining and reduction of aluminum; as a flux for aluminizing steel, in welding rods and for metals processing; to improve melt qualities during glass and enamel manufacturing, as a filler for resin-bonded grinding wheels; as an insecticide.

CHARACTERISTICS

Most domestic cryolite is manufactured synthetically. Synthetic cryolite is a white to light grey powder which melts about 1009°C and is insoluble in water. Cryolite acts as a stomach poison to insects. Human toxicity is low in relation to skin contact, moderate to high in relation to inhalation or ingestion.

CHEMICAL ANALYSIS

	TYPICAL RANGE	TYPICAL VALUES
Cryolite (Na_3AlF_6)	91.0% - 94.0%	93.0%
Fluorine (F)	48.0 - 52.0%	50.0%
Sodium (Na)	31.0 - 34.0%	32.0%
Aluminum (Al)	13.0 - 15.0%	13.0%
Alumina (Al_2O_3)	2.0 - 6.0%	3.5%
Silicon (Si)	0.14 - 0.30%	0.25%
Fluorspar (CaF_2)	0.04 - 0.09%	0.07%
Ferric Oxide (Fe_2O_3)	0.01 - 0.10%	0.05%
Free Moisture	0.05 - 0.12%	0.10%

PHYSICAL PROPERTIES

Screen Analysis % (Tyler Standard)*	%	Cum. %	%	Cum. %
+100 Mesh	5 - 25%	5 - 25%	16%	16%
+200 Mesh	25 - 48%	30 - 72%	37%	53%
+325 Mesh	16 - 34%	44 - 88%	75%	78%
-325 Mesh	12 - 36%	12 - 36%	22%	100%
Bulk Density	100 lbs. per Cubic Ft.			

* May contain particles of cryolite up to 3/8" maximum.

SHIPPING PACKAGE

Multiwall paper bags or bulk in rail hopper cars.

SHIPPING POINT

F.O.B. Chalmette, La.

PRICE

A quotation is available upon request from your Kaiser Chemical sales representative.

TERMS AND CONDITIONS OF SALE

Credit terms are net 30 days. Terms and conditions of sale are printed on the reverse side of Kaiser order acknowledgement form.