



TULSTAR PRODUCTS, INC.

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MATERIAL SAFETY DATA SHEET

COMPANY INFORMATION

Company Name: **TULSTAR PRODUCTS, INC.**
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Tulsa, OK 74105
Phone Number: (918) 749-9060
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Emergency Number: CHEMTREC 800-424-9300 (24 hours)

IDENTIFICATION

Product Name: Cryolite (Synthetic Powder)
Components: Trisodium hexafluoroaluminate
Chemical Formula: 3NaFAIF_3
CAS Number: 15096-52-3
Synonyms: Synthetic Cryolite

PHYSICAL/CHEMICAL CHARACTERISTICS

Boiling Point (c): N/A
Melting Point (c): 1027°C
Vapor Pressure: N/A
Specific Gravity (H₂O): D 20/4 -- (2.90 – 2.96) @ 20°C
Vapor Density (Air=1): NA
Bulk Density (kg/m³): 500-800
Solubility in Water (at 25°C; g/l): 0.41
PH (at 0.42 g/l): 6
Appearance and Odor: White crystalline, odorless powder
Decomposition Temperature: >1000°C

FIRE EXPLOSION AND HAZARD DATA

Flash Point: N/A
Flammable Limits in Air-
 % by Vol. Lower: None
 % by Vol. Upper: None
Extinguishing Media: Any Medium Acceptable if Fire in close proximity
Special Fire Fighting Procedures: N/A
Unusual Fire and Explosion Hazards: N/A

REACTIVITY DATA

Stability:	Stable under normal conditions
Conditions to Avoid:	N/A
Incompatibility (Materials to Avoid):	Strong acids & Strong Bases
Hazardous Decomposition or Byproducts:	Formation of Hydrogen fluoride gas.
Hazardous Polymerization:	Will not occur.
Conditions to Avoid:	Extreme Heat
Acute Toxicity:	-Oral Route, LD 50, > 2000 mg/kg, rat.
Chronic Toxicity:	- Inhalation, after prolonged exposure, rat, ≥ 1 mg/m ³ observed effect. -Oral route (diet), after repeated exposure, various species, Target organ: skeleton, ≥ 14 ppm observed effect. - Oral route (diet), after repeated exposure, various species, Target organ: skeleton,, 25ppm, observed effect (sodium fluoride) -In vitro, no mutagenic effects. -In vivo, ambiguous mutagenic effects. -No teratogenic effects. -No carcinogenic effect (Sodium fluoride)
Comments:	Chronic exposure may entail dental or skeletal fluorosis.

HEALTH HAZARDS DATA

Routes of Entry

Ingestion:	LD50 (oral, rat) >2 g/kg for Cryolite itself values are not known.
Skin:	Non-hazardous
Inhalation:	Believed to be no hazard.
Eyes:	May cause slight but transient eye irritation.
Signs and symptoms of overexposure:	Unknown

EMERGENCY AND FIRST AID PROCEDURES

Eye:	Open eyelids. Rinse with plenty of water to remove dust. Consult ophthalmologist if pain persists.
Skin:	Wash with plenty of water and a mild soap. Remove contaminated clothing.
Inhalation:	Remove victim from dusty atmosphere. Clean nose and mouth.
Ingestion:	Administer a slurry of magnesia (1 teaspoonful) in a glass of water) or, preferably, a solution of calcium gluconate. Induce vomiting. Seek medical advice. Large Volumes by ingestion can cause risk of Hypocalcemia with nervous disorders (tetany) and cardiac rhythm disorders. Also may cause risk of liver alterations and risk of general symptoms.

PRECAUTIONS FOR SAFE HANDLING AND USE

Precautions to be taken in Handling and Storing:	Keep container tightly closed and store in a dry place. Avoid dust during handling. Avoid Heating above decomposition temperature (>1000°C). Keep away from reactive products. Provide a well ventilated area for storage.
Released and spilled material:	Avoid spreading material in a cloud of dust. Collect material by an appropriate technique to prevent dust formation. Place in a closed, labeled, compatible container. Clean area with large quantities of water.
Waste disposal method:	Deposit in accordance with local, state or national legislation for hazardous chemicals.
Ecological Effects:	Prevent product from entering sewage system. Product is harmful for fish and microorganisms.

CONTROL MEASURES

Ventilation:	Keep airborne concentration below exposure limits.
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OSHA PEL: is 5 mg/fluorides/m³ as 8hrs. TWA
TWA: 2.5mg/m³
Respiratory Protection: Use a NOISH approved dust mask if excessive dust is present.
Gloves: Working gloves (recommended PVC)
Eyes: Goggles (dust proof)
Protective Clothing: Working clothes.
Work/Hygienic Practices: -No eating, drinking or smoking at the worksite.
-Shower and eye wash available
-Strict hygiene

NOTE:

In case of combinations and mixtures one must make sure that no new dangers can arise. In any case, the user is not exempt from observing all legal, administrative and regulatory procedures relating to the product, personal hygiene, and protection of human welfare and the environment.