

GELEST, INC.

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MATERIAL SAFETY
DATA SHEET

EMERGENCY TELEPHONE
CHEMTREC: 1-800-424-9300

NAME USED ON LABEL: **POTASSIUM HEXAFLUOROSILICATE - SIP6885.0**

CHEMICAL NAME: POTASSIUM HEXAFLUOROSILICATE

SYNONYMS: POTASSIUM SILICOFLUORIDE

CHEMICAL FAMILY: FLUOROSILICATE

FORMULA: K_2SiF_6

HMIS CODES HEALTH: 3 FLAMMABILITY: 0 REACTIVITY: 0

INGREDIENTS

IDENTITY	CAS NO.	%	TLV
POTASSIUM HEXAFLUOROSILICATE	16871-90-2	>98	not established

(OSHA PEL, inorganic fluoride as F 2.5mg/m³)

PHYSICAL DATA

Boiling Point: NA
Specific Gravity: 2.67
Vapor Density: NA
% volatiles: NA
Molecular Weight: 220.29
Appearance & Color: White powder

Melting Point: not determined
Vapor Pressure: not determined
Solubility in water: 1.2grams/liter
Evaporation rate: NA
Other: NA

FIRE & EXPLOSION DATA

Flash Point, COC: Not Flammable Autoignition Temp.: NA
Flammability Limits- LEL: NA UEL: NA

Extinguishing Media: not combustible

Special Fire Fighting Procedures: Avoid eye and skin contact. Do not breathe fumes or inhale vapors.

Unusual Fire and Explosion Hazards: Irritating fumes vapors may develop when material is mixed with other materials and exposed to elevated temperatures or open flame.

-1-(SIP6885.0)

ENVIRONMENTAL INFORMATION

Spill response: May be hazardous to aquatic life if released to open waters. Sweep material while wearing a dust mask. Transfer to a suitable container for disposal.

Recommended Disposal: Mix with sodium carbonate and calcium chloride, then either slowly add water or dispose of as solid waste. Follow all chemical pollution control regulations.

HEALTH HAZARD DATA

Eye Contact: Will cause irritation or conjunctivitis.

Skin contact: Material is extremely destructive to mucous membranes.

Inhalation: Inhalation of particulates will irritate the respiratory tract. Overexposure causes inflammation and edema of the larynx and bronchi. Symptoms of exposure are a burning sensation, coughing, wheezing and laryngitis.

Oral Toxicity - gpg: 500mg/kg

Chronic Exposure: May cause osteofluorosis.

SUGGESTED FIRST AID

EYES: In case of contact, immediately flush eyes with flowing water for at least 15 minutes. Get medical attention.

SKIN: Flush with water, then wash with soap and water.

INHALATION: Move exposed individual to fresh air. Call a physician.

INGESTION: Never give fluids or induce vomiting if patient is unconscious or having convulsions. Get medical attention.

Note to Physician: Calcium gluconate is often considered in topical exposures to hydrofluoric acid and may be appropriate for severe exposures to fluorosilicates.

REACTIVITY DATA

Stability: Stable

Incompatibility (materials to avoid): Compatible with most materials. Dissolves in strong acid or base.

Hazardous decomposition products: Hydrogen fluoride.

-2-(SIP6885.0)

SPECIAL PROTECTION INFORMATION

Ventilation: Local exhaust is required. Mechanical is recommended.

Respiratory Protection: If exposure exceeds TLV air-supplied or combination dust mask - acid gas respirator.

Eye and Face Protection: Chemical worker's goggles. Do not wear contact lenses.

Other Clothing and Equipment: Rubber, neoprene or nitrile gloves. An eyewash and emergency shower should be available. Launder clothing before reuse.

OTHER PRECAUTIONS

For research and industrial use only.

Storage and Handling: Store in sealed containers.

TRANSPORTATION

DOT SHIPPING NAME: POTASSIUM FLUOROSILICATE

DOT HAZARD CLASS: 6.1

DOT LABEL: TOXIC

DOT ID No: UN 2655

PG: III

Prepared by safety and environmental affairs MSDS ISSUE DATE SIP6885.0: 7/23/13
SUPERSEDES: none

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