

MATERIAL SAFETY DATA SHEET

POTASSIUM TITANIUM FLUORIDE (K₂TiF₆)

Manufacturer:

Triveni Chemicals

135 Pancharatna Char Rasta

G I D C Vapi.396195 Gujarat India

Tel. 91 260 2400022 / 3258683 Fax. 2400045

1) Identity of Materials

Product Name: Potassium Titanium Fluoride

Chemical Designation : K₂TiF₆

Trade Name: Potassium Fluotitanate

Formula: K₂TiF₆

Label : Toxic

CAS No. : 16919-27-0

UN No. : 3288

Class : 6.1

Regulated Identification Shipping name –

Codes/Label : 6.1/Toxic

Hazchem Code: NA

Hazardous waste identification No. : NA

1. Potassium Titanium Fluoride – 98.5% 16919-27-0

2) Physical and Chemical Properties / Specification

Physical State(Gas,Liquid,Solid) :	Solid
Boiling Point in Deg. C :	Decomposes > 600
Vapour Pressure :	1 mm Hg@1517oC
Appearance:	White Crystalline Powder
Melting/Freezing Point in Deg.C :	NA
Evaporation Rate at 30 Deg. C :	NA
Odour:	Odourless
Vapour Density(air) :	NA
Solubility in water at 30 Deg. C :	13 gm/l at 20oC

Others(Corrosivity,etc) : Toxic
Specific Gravity (Water =1) : 3.01@20oC
PH (20oC) : 4

3)Fire and Explosive hazards data

Explosion/Flammability : N.A
Flash Point : N.A
LEL% : Not Pertinent
Auto Ignition Temp Deg. C: Not Pertinent
UEL% : Not Pertinent
TDG Flammability %(Classification) : Not Listed

4)Reactive Hazards

Stability to Impact (Hazardous combustion products) : Emits toxic fumes of Fluorin
Static Discharge (Hazardous decomposition product) : During melting operations at elevated temperatures,various fluoride compound willl be liberated possibly Hydrogen fluoride.

Reactivity: NA
Hazardous Polymerization May / May Not Occur (Conditions to Avoid) : NA
Incompatibility (Materials to Avoid) : Strong Oxidising agent.

5)Health Hazards Data

Routes of Entry: Inhalation,Skin contact,Eye contact
Effects of Exposure / Symptoms :
Inhalation : Respiratory irritation,possible nose bleeding or vomiting,Chronic exposures aggravates Bronchitis Asthma ,increase bone density
Skin: Irritates skin
LD50 (in rat) orally or percutaneous absorpion : NA
LC50 (in rat) mg/l for 4HRs. : NA
PEL PPM mg/cu.m NA
STEL PPM NA
TLV of ACGIH PPM mg/cu.m NA
Odour Threshold ppm mg/cu.m NA

Emergency Treatment:

Inhalation : Remove the victim to fresh air area and rince nose and mouth with water.If needed ,give aritificial respiration

Ingestion : Perform gastric lavage with lime water or 1% Calcium Chloride solution

Skin : Flush with plenty of water for atleast 15 Mins. while removing contaminated clothings

Eyes : Flush with water atleast for 15 mins. occasionally lifting upper and lower lids continue irritating with normal saline until ready to transport to hospital

6)Hazard Specification

NEPA Hazard signal

Health

Flammability

Stability

Special

Not Listed Inhalation Acute Not Flammable Stable Refer (4)

7)Known Hazards

Combustible Liquid: NA

Water reactive material: NA

Irritant: YES

Flammable Material: Not Flammable

Oxidiser: NA

Sensitizer: NO

Pyrophoric Material: NA

Organic Peroxide: NA

Carcinogen: YES

Explosive Material: NO

Corrosive Material: YES

Mutagen: YES

Unstable Material: Stable

Compressed Gas: NO Others (Specify) : Refer (5)

8)Safe Usage Data

Ventilation General : Local Exhaust

Protective Equipment: Required

Protective clothing: eye wash,safety shower

Eyes(Specify) : Safety Goggles

Respiratory(Specify) : Air line breathing apparatus

Gloves(Specify) : PVC

Clothing(Specify) : PVC Pant ,Shirt and Hood

Others(Specify) : Protective clothing ,eye wash,safety shower,Nose/Dust Mask.

Precautions: Avoid contact with skin

Handling & Storage Others(Specify) : Store in cool ,dry and ventilated area,in plastic,rubber which should be well closed.MS Drums with LDP inner liner.

9)Emergency Response Data

Fire: Not Flammable

Fire extinguishers media: NA

Special Procedures: Keep the containers cool by spraying water if exposed to heat or fire

Unusual Hazards: Emits toxic fumes of Fluorine

Exposure: (Inhalation, skin and eye contact, Ingestion) Refer (5)

First Aid Measures: Refer (5)

Spills Sweep and collect without making dust. Wash the area with water. Steps to be taken for

Waste disposal methods Seal all waste in paper tight plastic bags for eventual disposal

.Dilute with large quantities of water, neutralize with lime and again dilute with water. (Follow Federal or local regulations)

10) Additional Information

Avoid contact with acids, acid fumes, moisture. Dissolves in water to form weak solution of

Hydrofluoric acid.