

## **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 Fluorine  
**Static Discharge ( Hazardous decomposition product) :** During melting operations at elevated temperatures, various fluoride compound will 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 absorption : 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 rinse nose and mouth with water. If needed, give artificial 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

<b>Fire:</b>	Not Flammable
Fire extinguishers media:	NA

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

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.