



SAFETY DATA SHEET

SECTION 1. IDENTIFICATION

GHS Product Identifier: Rulflux® P Potassium Titanate

Chemical Name: Mixture (Potassium Titanate)

Recommended Applications: Used singularly or as a component in plastics, welding or friction industries.

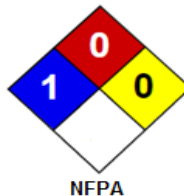
Other Names: Potassium Titanate, dipotassium titanium trioxide, PT-FR

Manufacturer Information: TAM Ceramics, LLC (#220821)
 4511 Hyde Park Blvd Niagara Falls, NY 14305
 Phone Number: 716-278-9400

Website: www.tamceramics.com

CHEMICAL EMERGENCY
 Spill, Leak, Fire, Exposure
 or Accident

CHEMTREC 24 HOUR EMERGENCY TELEPHONE
DOMESTIC NORTH AMERICA 800-424-9300
INTERNATIONAL CALL: 703-527-3887
Collect Calls Accepted



Health	1
Fire	0
Reactivity	0
Personal Protection	X

HMIS

SECTION 2. HAZARD(S) IDENTIFICATION

GHS Pictogram:



Signal word:

WARNING

GHS classification:

Eye irritation, Category 2
 Skin irritation, Category 2

Hazard Statement:

Inert particles can be slightly, mechanically irritating to the eyes.
 Prolonged skin contact may cause skin irritation or dermatitis.
 Overexposure by inhalation may cause respiratory irritation.

Precautionary Statement:

Wash hands thoroughly after handling. Minimize exposure by wearing protective gloves, clothing, eye protection and respiratory masks. Have a clean change of works clothes readily available. Avoid dust formation and utilize good housekeeping practices.

Route of Exposure:

Eyes, skin, inhalation and ingestion.

Potential Health Effects:

Eye: May cause a slight irritation.
 Skin: May cause a slight irritation.
 Inhalation: Prolonged inhalation may cause respiratory tract irritations.
 Ingestion: May irritate digestive tract if swallowed.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Components	CAS-No	EC number	Weight %	OSHA	ACGIH
Potassium Titanate	12030-97-6	234-748-6	100%	Not established	Not established

SECTION 4. FIRST AID MEASURES

Eye contact: Rinse immediately with plenty of water, also under the eyelids. Get medical attention if irritation develops.**Skin contact:** Wash off immediately with soap and plenty of water. Remove and wash contaminated clothing before re-use. If symptoms persist, call a physician.**Inhalation:** Move to fresh air. If breathing is difficult, give oxygen. If not breathing, give artificial respiration. If symptoms persist, call a physician.**Ingestion:** Drink plenty of water. Consult a physician if necessary. Do not induce vomiting without medical advice.**Notes to physician:** Treat symptomatically.

SECTION 5. FIRE-FIGHTING MEASURES

Flash point: No data available**Suitable extinguishing media:** Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.**Hazardous decomposition products:** Thermal decompositic**Special protective equipment for firefighters:** As in any fire, wear self-contained breathing apparatus pressure-demand, NIOSH (approved or equivalent) and full protective gear.**Unusual hazards:** Dust may form explosive mixture in air.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Avoid dust formation. Evacuate area of all unnecessary personnel. Avoid contact with skin, eyes and clothing. Use personal protective equipment. Fine dust dispersed in air may ignite.**Environmental precautions:** Prevent further leakage or spillage if safe to do so. Do not let product enter drains. Do not flush into surface water or sanitary sewer system.**Methods for cleaning up:** Use approved industrial vacuum cleaner for removal. Wear personal protective equipment. Dispose of promptly.

SECTION 7. HANDLING AND STORAGE

Handling: Handle in accordance with good industrial hygiene and safety practice. Avoid dust formation. Avoid contact with skin, eyes and clothing. In case of insufficient **Storage:** Keep container tightly closed in a dry and well-ventilated place

SECTION 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Engineering measures: Ensure adequate ventilation, especially in confined areas. **Respiratory protection:** Use NIOSH approved respirator when ventilation is inadequate. **Hand protection:** Impervious gloves.
Skin and body protection: Lightweight protective clothing.
Eye protection: Safety glasses with side-shields.
Exposure limits: See Section 2.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Color: White	Odor threshold: No Data Available
Odor: Odorless	Vapor pressure: No Data Available
Boiling point/range (°C): No data available	Flash point: No Data Available
Melting point/range (°C): 1560 - 1840	Flammability (solid, gas): No Data Available
Vapor pressure (mmHg): No data available	Upper/lower flammability or explosive limits: No Data Available
Water solubility (mg/l): Insoluble	Vapor density: No Data Available
Physical state: Powder	Relative density: No Data Available
Molecular weight: No data available	Partition coefficient: n-octanol/water: No Data Available
pH: No data available	Auto-ignition temperature: No Data Available
Specific gravity (Water =1): 3.800 - 4.300	Decomposition temperature: No Data Available
Evaporation rate (Water =1): No data available	Viscosity: No Data Available
VOC content (%): No data available	

SECTION 10. STABILITY AND REACTIVITY

Stability: Stable at normal conditions.
Polymerization: Will not occur.
Hazardous decomposition products: None under normal use.
Materials to avoid: None known.
Conditions to avoid: Avoid dust formation.

SECTION 11. TOXICOLOGICAL INFORMATION

Acute toxicity: To the best of our knowledge the acute and chronic toxicity of the substance is not fully known. Skin contact: May cause allergic skin reaction.
Chronic toxicity: To the best of our knowledge the acute and chronic toxicity of the substance is not fully known.
Inhalation: This product contains one or more non-asbestos fibers or other manmade fibers. Although relatively little is known about the long term health effects from exposure to dust from friction materials, studies of respirable fibers, which are physically similar to asbestos, suggest the potential for chronic lung disease, including fibrosis, with overexposure.
Carcinogenic effects: Titanium Dioxide is listed by IARC as possibly carcinogenic to humans (Group 2B). This listing is based on inadequate evidence of carcinogenicity in humans and sufficient evidence in experimental animals.

SECTION 12. ECOLOGICAL INFORMATION

Aquatic toxicity: No information available
Persistence and degradability: No information available

SECTION 13. DISPOSAL CONSIDERATIONS

Waste from residues / unused products: Waste must be disposed of in accordance with federal, state and local environmental control regulations. Where possible, recycling is preferred to disposal or incineration

SECTION 14. TRANSPORT INFORMATION

DOT Classification (U.S.): Not a DOT controlled material (United States).
Proper shipping name: Not regulated
TDG (Canada)
Proper shipping name: Not regulated.

SECTION 15. REGULATORY INFORMATION**U.S. Regulations:**

Not subject to the provisions of SARA 313 Title III
Not subject to TSCA 12(b) Export Notification

State Regulations

This product or its ingredients have been evaluated for New Jersey, Pennsylvania, and California Prop 65 supplier notification requirements. Substances that are subject to notification requirements, if any, are listed below.

Titanium Dioxide

NJRTK: sn 1861
PARTK: Listed (NJRTK)

Canadian WHMIS

WHMIS hazard class for this product or ingredients: D2A Very toxic materials.

International Inventories

TSCA 8(b): All the ingredients are on the TSCA list.
 Canadian DSL: All the ingredients are on the DSL.
 EINECS: All the ingredients are on the EINECS list.
 Philippines (PICCS): Listed.
 Japan (ENCS): Listed.
 Korea (KECL): Listed.
 China (IECS): Listed.
 Australia (AICS): Listed.

For Industrial Use Only**National Fire Protection Association (U.S.A.):****Health: 1****Fire: 0****Physical Hazard: 0****PPE: X****Prepared by:** Product Manufacturer, TAM Ceramics Group of NY, LLC**Protective Equipment:** Gloves. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Safety glasses.

The information and recommendations contained in this Safety Data Sheet have been compiled from sources believed to be reliable and to represent the most reasonable current opinion on the subject when the SDS was prepared. No warranty, guaranty or representation is made as to the correctness or sufficiency of the information. The user of this product must decide what safety measures are necessary to safely use this product, either alone or in combination with other products, and determine its environmental regulatory compliance obligations under any applicable federal or state laws.

Last Updated: May 2015

End of Safety Data Sheet