

N.V. **VAN RIEL** S.A.

HOOGKAMERSTRAAT 335, P.B. 62, B-9140 TEMSE (BELGIUM)

Potassium Fluorotitanate

SAFETY DATA SHEET

Prepared in accordance with Commission Regulation (EU) 453/2010
(Compliant with REACH (Regulation (EC) No 1907/2006) & CLP (Regulation (EC) No 1272/2008))

Date of issue : 24.10.2017

Version: EN/01

SECTION 1: Identification of the substance and of the company/undertaking

1.1. Product identifier

Substance name: Potassium Fluorotitanate

Index No: Not assigned

EC No: 240-969-9

REACH registration number: No registration number is given yet for this pre-registered phase-in substance since the transition period for its registration according to Article 23 of REACH has not yet expired.

CAS No: 16919-27-0

1.2. Relevant identified uses of the substance and uses advised against

Relevant identified uses:

- Catalyst for polypropylene synthesis
- Analysis reagent
- Produce titanium and titanium acid

Uses advised against:

No information available

1.3. Details of the supplier of the safety data sheet

Manufacturer/Supplier: NV VAN RIEL SA

Street address/P.O. Box: Hoogkamerstraat 335

Country ID/Postcode/Place: 9140 TEMSE, Belgium

Telephone number: +32 (0) 3 771 09 89

E-mail: vr@vanrieltmse.be

1.4. Emergency telephone number:

Poison centres, Europe: Emergency telephone number

SLOVAKIA (Bratislava) +421 2 54 77 4 166; SLOVENIA (Ljubljana) + 386 41 650 500; SPAIN (Barcelona) +34 93 227 98 33 AUSTRIA (Vienna Wien) +43 1 40 400 2222; BELGIUM (Brussels Bruxelles) +32 70 245 245;

BULGARIA (Sofia) + 359 2 9154 409 / +359 887 435 325; CZECH REPUBLIC (Prague Praha) +42 2 2491 9293 or +42 2 2491 5402; DENMARK (Copenhagen) +45 35 31 54 04; FINLAND (Helsinki) +358 9 471 977; FRANCE (Paris) +33 1 40 05 48 48; GERMANY (Berlin) +49 30 450 653565; GREECE (Athens Athinai) +30 10 779 3777; HUNGARY (Budapest) +36 80 20 11 99; ICELAND (Reykjavik) +354 525 111, +354 543 2222; IRELAND (Dublin) +353 1 8379964; ITALY (Rome) +39 06 305 4343; LATVIA (Riga) +371 704 2468; LITHUANIA (Vilnius) +370 2 36 20 52, +370 2 36 20 92; NETHERLANDS (Bilthoven) +31 30 274 88 88; NORWAY (Oslo) +47 22 591300; POLAND (Gdansk) +48 58 301 65 16 or +48 58 349 2831; PORTUGAL (Lisbon Lisboa) 808 250 143 (for use only in Portugal), +351 21 330 3284; ROMANIA (Bucharest) +40 21 230 8000; or +34 93 227 54 00 bleep 190; SWEDEN (Stockholm) +46 8 33 12 31 (International) 112 (National); UNITED KINGDOM (London) 0870 243 2241.

Reference: <http://www.who.int/pcs/poisons/centre/directory/euro/en/>

SECTION 2: Hazards identification

2.1. Classification of the substance

Classification according to Regulation (EC) No 1272/2008 (CLP/GHS):

Acute Oral Tox. 4; H302
Eye Irrit. 2; H319
Skin Irrit. 2; H315
STOT SE 3; H335

Classification according to Directive 67/548/EEC:

Xn (Harmful); R22
Xi (Irritant); R36/37/38

Additional Information:

For full text of H and R-phrases: see section 2 and 16 respectively

2.2. Label elements

Labeling according to Regulation (EC) No 1272/2008 (CLP/GHS):

Hazard pictograms:



Signal word:

Warning!

Hazard statements:

H302: Harmful if swallowed
H319: Causes serious eye irritation
H315: Causes skin irritation
H335: May cause respiratory irritation

Precautionary statements:

P301 + P312: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.
P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P302 + P352: IF ON SKIN: Wash with plenty of soap and water.
P261: Avoid breathing dust/fume

P304 + P340: IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P312 Call a POISON CENTER or doctor/physician if you feel unwell.

2.3. Other hazards

Not known

SECTION 3: Composition/information on ingredients

3.1. Substance

Product identifier type in accordance with Article 18(2) of Regulation (EC) No 1272/2008	Identifier number	Identification name	Weight % content (or range)	EC Number
CAS	16919-27-0	dipotassium hexafluorotitanate	97 (w/w)	240-969-9

SECTION 4: First aid measures

4.1. Description of first aid measures

following inhalation:

Remove to fresh air. Get medical attention.

following skin contact:

Remove contaminated clothing, jewelry, and shoes immediately. Wash for approximately 15 – 20 minutes with soap or mild detergent and large amounts of water until no evidence of chemical remains. Get medical attention, if needed.

following eye contact:

Immediately flush with plenty of water. Get medical attention.

following ingestion:

Contact local poison control center or physician immediately. Never make an unconscious person vomit or drink fluids. When vomiting occurs, keep head lower than the hips to help prevent aspiration. If person is unconscious, turn head to side. Get medical attention immediately.

notes for the doctor:

For ingestion, consider gastric lavage.

4.2. Most important symptoms and effects, both acute and delayed

Inhalation: Irritation may lead to chemical pneumonitis and pulmonary edema. Cause chemical burns to the respiratory tract. May cause abdominal pain, nausea, vomiting, and inflammation of the gums and mouth.

Eye: Contact with eyes causes severe irritation, and may cause eye burns.

Skin: May cause severe irritation and possible burns

Ingestion: Causes gastrointestinal tract irritation

4.3. Indication of any immediate medical attention and special treatment needed

No information available.

SECTION 5: Fire-fighting measures

5.1. Extinguishing media

In case of fire use water spray, dry chemical, carbon dioxide, or chemical form.

5.2. Special hazards arising from the substance

Emits toxic fumes under fire conditions

5.3. Advice for fire-fighters

Because fire may produce toxic thermal decomposition products, wear a self-contained breathing apparatus (SCBA) with a full face-piece operated in pressure-demand or positive-pressure mode. Do not release runoff from fire control methods to sewers or waterways.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Wash hands thoroughly after handling.
Do not eat, drink or smoke when using this product.
Wear protective gloves/protective clothing/eye protection/face protection.
If eye irritation persists: Get medical advice/attention.
If skin irritation occurs: Get medical advice/attention.
Take off contaminated clothing and wash before reuse.

6.2. Environmental precautions

Prevent spillage from entering drains, sewer, basement or confined areas. If the spillage contaminates rivers, lakes or drains inform respective authorities.

6.3. Methods and material for containment and cleaning up

Clean up spills immediately, sweep up, and then place into a suitable container for disposal. Don't create dust or inhale the dust. Use appropriate PPE during the activities.

6.4. Reference to other sections

Please see Section 8

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid direct contact with skin. If dust is generated, use appropriate dust mask. Use only outdoors or in a well-ventilated area.

7.2. Conditions for safe storage, including any incompatibilities

Store in a tightly closed container in a cool, dry area away from heat, sources of ignition, acids and oils.

7.3. Specific end use(s)

No information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limit values:

Not available

8.2. Exposure controls

Appropriate engineering controls:

Provide general or local exhaust ventilation systems. Local exhaust ventilation is preferred because it prevents contaminant dispersion into the work area by controlling it at its source. Make emergency eyewash stations, safety/quick-drench showers, and washing facilities available in work area.

Individual protection measures:

Eye/face protection:

Wear protective eyeglasses or chemical safety goggles, eye- and face-protection regulations. Contact lenses are not eye protective devices. Appropriate eye protection must be worn instead of, or in conjunction with contact lenses.

Skin/Hand protection:

Wear chemically protective gloves, boots, aprons, and gauntlets to prevent skin contact. Take off contaminated clothing and wash before reuse.

Respiratory protection:

Wear an approved respirator. For emergency or non-routine operations (cleaning spills, reactor vessels, or storage tanks), wear an SCBA.

Thermal Hazards:

No information available

Environmental exposure controls:

No information available

SECTION 9: Physical and chemical properties**9.1. Information on basic physical and chemical properties**

Appearance	colorless to white solid flakes
Odour	No data available
Odour threshold	No data available
pH	4-5 (saturated solution)
Melting point/freezing point	802 °C
Initial boiling point and boiling range	No data available
Flash point	No data available
Evaporation rate	No data available
Flammability (solid, gas)	No data available
Upper/lower flammability or explosive limits	No data available
Vapour pressure	No data available
Specific Gravity (H₂O=1, at 4 °C)	3.0
Density	1100-1200 kg/m ³
Solubility	12.7 g/L @ 20 °C
Partition coefficient: n-octanol/water	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available
Explosive properties	No data available

Oxidising properties	No data available
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9.2. Other information

Not available

SECTION 10: Stability and reactivity**10.1. Reactivity**

The product is reactive with the incompatible materials (please refer section 10.5).

10.2. Chemical stability

Potassium Fluorotitanate is stable at room temperature in closed containers under normal storage and handling conditions

10.3. Possibility of hazardous reactions

Hazardous polymerization cannot occur.

10.4. Conditions to avoid

Extreme heat

10.5. Incompatible materials

Acids, oils, strong oxidizing agents.

10.6. Hazardous decomposition products

Thermal oxidative decomposition of Potassium Fluorotitanate can produce Hydrogen fluoride, potassium oxide.

SECTION 11: Toxicological information**11.1. Information on toxicological effects****Acute toxicity:**

Rat, oral, LD50: 324 mg/kg

Skin corrosion/irritation:

Causes skin irritation

Serious eye damage/irritation:

Causes serious eye irritation

Respiratory or skin sensitization:

May cause respiratory irritation

Germ cell mutagenicity:

No data available

Carcinogenicity:

No data available

Reproductive toxicity:

No data available

STOT-single exposure: No data available

STOT-repeated exposure: No data available

Aspiration hazard: No data available

SECTION 12: Ecological information

12.1. Toxicity

Fish (trout), LC50 (240-hr) = 64 mg/L

12.2. Persistence and degradability

No data available

12.3. Bioaccumulative potential

No data available

12.4. Mobility in soil

No data available

12.5. Results of PBT and vPvB assessment

The PBT and vPvB Assessment has not been carried out.

12.6. Other adverse effects

No information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Dispose of contents/container in accordance with local/regional/national/international regulation. Contact your supplier or a licensed contractor for detailed recommendations.

SECTION 14: Transport information

Regulation	ADR/RID	ADN	IMDG Code	ICAO-TI/IATA-DGR
14.1. UN Number	N/A	N/A	N/A	N/A
14.2. UN proper shipping name	N/A	N/A	N/A	N/A
14.3. Transport hazard class(es)	N/A	N/A	N/A	N/A
14.4. Packing group	N/A	N/A	N/A	N/A
14.5. Environmental hazards	N/A	N/A	N/A	N/A
14.6. Special precaution for users	N/A	N/A	N/A	N/A
14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC code	N/A	N/A	N/A	N/A
Hazard Label	N/A			

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance

CAS# 16919-27-0 is listed on the EINECS inventory.

15.2. Chemical safety assessment

No Chemical Safety Assessment has been carried out.

SECTION 16: Other information

Information which has been added, deleted or revised:

This safety data sheet is drawn up to comply with the requirements of Regulation (EC) No. 1907/2006 (REACH), as amended by Annex I to Commission Regulation (EU) No 453/2010 of 20 May 2010.

Key or legend to abbreviations and acronyms used in the safety data sheet:

ADR: European Agreement concerning international carriage of Dangerous goods by Road
CAS: Chemical Abstracts Service
EC: European Community
H: Hazard Statement
ICAO: International Civil Aviation Organization
IMDG: International Maritime Dangerous Goods
IATA: International Air Transport Association

Key literature references and sources for data:

eChemPortal and EC 1272/2008

List of relevant R (Risk) phrases and S (safety) phrases:

Risk Phrases :

R22: Harmful if swallowed

R36/37/38: Irritating to eyes, respiratory system and skin

Safety Phrases :

S26: In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

S36/37/39: Wear suitable protective clothing, gloves and eye/face protection.

S45: In case of accident or if you feel unwell, seek medical advice immediately

Disclaimer:

All information, recommendations and suggestions appearing herein are based upon sources believed to be reliable. However, it is the user's responsibility to determine the safety, toxicity and suitability for its own use of this product. NV VAN RIEL SA does not assume any liability arising out of the use by others of this product.