

Page Number:	1/8
Revision N°:	6
Revision date:	10.01.2023
Supersedes date:	12.10.2019

SAFETY DATA SHEET

(According to Regulation EC n.1907/2006 Art. 31 annex II, as modify by EC n.830/2015 and n.878/2020 Regulation)

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name: Twineflon® / R12D06
Product information: Natural Polytetrafluoroethylene (PTFE) tapes with Installation aid

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

Recommended use: Metal and plastic pipes thread sealant for hydraulic use, industrial products.
Restrictions on use: Other than those identified

1.3. Details of the supplier of the safety data sheet

Manufacturer: Resitape Srl
Address: Via per Cascina Rogorino, 1
20060 Gessate (MI) - Italy
Telephone: +39 02 9541181
Fax: +39 02 95411836
Web site: www.resitape.com
E-mail: info@resitape.com

1.4. Emergency telephone number: +39 02 9541181 (daytime)

2. HAZARD IDENTIFICATION

2.1. Classification of the substance o mixture

This material is not classified as health or environmental hazardous according to CLP Regulation (EC) N° 1272/2008, as amended, on classification, labelling, and packaging of substances and mixtures.

2.2. Labels elements

According to CLP Regulation (EC) 1272/2008 as amended.

Pictograms: None
Signal word: None
Hazard Statement: None
Precautionary Statement: None

Page Number:	2/8
Revision N°:	6
Revision date:	10.01.2023
Supersedes date:	12.10.2019

When thermally decomposed, inhalation of the fumes may cause fever, breathing difficulties, cough and shivering. Contamination of tobacco products with P.T.F.E. powder may cause effects similar to those above – known as Fume fever.

2.3. Other hazards

In accordance with Regulation 1272/2008/EC (CLP)

No specific hazards are known respecting the directions for storage and handling.

The product does not contain any substance identified as having endocrine disrupting properties above the legal limits in accordance with the criteria established in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605. The product does not contain any substance above the legal limits included in the list established in accordance with Article 59 (1), of Regulation (EC) No 1907/2006 to have endocrine disrupting properties or identified as having endocrine disrupting properties, in accordance with the criteria established in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

The product does not contain any substances above the legal limits that meet the criteria for classification as PBT (persistent/bioaccumulative/toxic) or vPvB (very persistent/very bioaccumulative).

3. COMPOSITION/INFORMATION ON INGREDIENTS

Ingredient	CAS N°	REACH N°	% by Weight	Classification
Polytetrafluorethylene (homopolymer)	9002-84-0	Not applicable	≥ 99.9	//
Installation aid	Mixture		100	//

This product is considered non-hazardous when used according to accepted practices for the intended use. See also chapter 16 "Other information".

For information on ingredient occupational exposure limits or PBT or vPvB status, see sections 8 and 12 of this SDS.

4. FIRST AID MEASURES

4.1. Description of first aid measures

No first aid measures are needed in normal condition

Inhalation In case of inhalation of decomposition products, remove patient to fresh air losing clothing and seek medical attention.

Eye contact N/A

Skin contact N/A

Ingestion N/A

Page Number:	3/8
Revision N°:	6
Revision date:	10.01.2023
Supersedes date:	12.10.2019

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

See Section 11.1 Information on toxicological effects

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

In case of unease and seek medical attention

5. FIREFIGHTING MEASURES

5.1. Extinguishing media

Suitable extinguishing: Use media suitable for surrounding fire.

Not suitable: N/A

5.2. Special hazards arising from the substance or mixture

Under fire conditions: In case of fire, avoid inhalation of combustion gases.

The high temperature could generate a thermal decomposition of the product.

See section 10.6. In case of fire avoid inhaling the smoke.

5.3. Advice for fire-fighters

When fire fighting conditions are severe and total thermal decomposition of the product is possible, wear full protective clothing and self-contained, positive pressure or pressure demand breathing apparatus with full face-piece and helmet.

Fluoropolymers can rise the relative toxicity of the combustion gases formed

6. ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment, and emergency procedures

N/A

6.2. Environmental precautions

N/A

6.3. Methods and material for containment and cleaning up

In case of Spillage: Sweep up to avoid slippage, use drums with cover

Waste Disposal: Conform to all applicable regulations.

6.4. Reference to other sections

Refer to Section 8 and Section 13 for more information

Page Number:	4/8
Revision N°:	6
Revision date:	10.01.2023
Supersedes date:	12.10.2019

7. HANDLING AND STORAGE

7.1. Precautions for safe handling

Bulk quantities of PTFE polymers should be stored away from flammable materials and in well-ventilated areas. However, in most situations, whether in storage or use, the quantity of material involved is small, and so no special measures should be taken. Provide suitable exhaust ventilation at machines when processing at elevated temperatures.

7.2. Conditions for safe storage including any incompatibilities

No special storage requirements.

7.3. Specific end use(s)

See information in Section 7.1 and 7.2 for handling and storage recommendations.

For the identified uses listed in Section 1, the recommendations in Section 7 should be observed. See Section 8 exposure controls and personal protection recommendations.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

There are no known occupational limits specific to the substance listed in Section 3.

8.2. Exposure controls

No special protection by way of clothing or equipment is required to handle the product. However as in any industrial activity good hygiene and housekeeping practises should be applied. Provide temperature safety devices.

When product is heated provide appropriate local exhaust. Use general dilution ventilation and/or local exhaust ventilation to maintain levels of thermal decomposition products below their exposure guidelines.

9. PHYSICAL AND CHEMICAL PROPERTIES

	PTFE Thread	Installation aid
Appearance:	Solid, thin, flexible tape or wire	light yellow
Colour:	Natural white or transparent	
Odour:	None	
pH:	N/A	6,8 ± 0,2
Viscosity:	N/A	
Specific Gravity	0,25-2,20 g/cm ³	
Melting Point:	330-345 °C	
Boiling Point:	N/A	
Solubility in H ₂ O:	Insoluble	Soluble

Page Number:	5/8
Revision N°:	6
Revision date:	10.01.2023
Supersedes date:	12.10.2019

Solubility (other)	Insoluble in all common solvents
Flash Point:	Does not flash
Auto Ignition Temp.:	575 °C approx.
Explosive properties:	N/A
Oxidising properties:	N/A

10. STABILITY AND REACTIVITY

10.1. Reactivity

This material may be reactive with certain agents under certain conditions (see the remaining headings in this section).

10.2. Chemical stability

Stable product

10.3. Possibility of hazardous reactions

Stable product

10.4. Conditions to avoid

Not determined

10.5. Incompatible materials

Inert. Although reaction with alkali and alkaline earth metals.

Reactions with metals in powder form occur from 370°C onwards.

Incompatible with elemental fluorine and interhalogen compounds at elevated temperatures and pressures (no reaction at room temperature and normal pressures).

10.6. Hazardous decomposition products

No hazardous decomposition products if storage and handling requirements are followed.

Thermal decomposition: > 260 °C continuous. Significant decomposition above 400°C

Combustion gases formed during the decomposition could be:

- Carbon monoxide
- Hydrogen fluoride
- Carbonyl fluoride
- Tetrafluoroethylene
- Hexafluoropropylene
- Perfluoroisobutylene

Page Number:	6/8
Revision N°:	6
Revision date:	10.01.2023
Supersedes date:	12.10.2019

11. TOXICOLOGICAL INFORMATION

11.1. Information on Toxicological effects

General:	According to experience the product is considered to be harmless to health if handled in the correct manner.
Acute:	Flu like transient sickness. The warm vapor may be causes an irritation of human respiratory system with may cause fever, breathing difficulties, cough, and shivering.
Chronic:	Long-term exposure to the product is not thought to produce chronic effects adverse to the health (as classified by EC Directives using animal models); nevertheless exposure by all routes should be minimised as a matter of course.
Routes of Entry:	a) Inhalation – high dust concentrations may be an irritant to the upper respiratory tract. b) Eyes – mechanical irritation c) Skin – not irritating and not absorbing. May cause physical abrasion. d) Ingestion – inert when ingested by rats.

Ingredient	Toxicity	Irritation
Polytetrafluorethylene	Oral (rat) LD 50: 1250 mg/kg *	<u>Not Available</u>

* Value obtained from manufacturer's SDS.

12. ECOLOGICAL INFORMATION

12.1. Toxicity*

Ingredient	End point	Test Duration (hr)	Species	Value	Source
Polytetrafluorethylene	N/A	N/A	N/A	N/A	N/A

* Value obtained from manufacturer's SDS.

12.2. Persistence and degradability*

Ingredient	Persistence: Water/Soil	Persistence: Air
Polytetrafluorethylene	High	<u>High</u>

* Value obtained from manufacturer's SDS.

Page Number:	7/8
Revision N°:	6
Revision date:	10.01.2023
Supersedes date:	12.10.2019

12.3. Bioaccumulative potential*

Ingredient	Bioaccumulation
Polytetrafluorethylene	Low

12.4. Mobility in soil

No product test data available.

12.5. Results of the PBT and vPvB assessment

According to Annex XIII of Regulation (EC) No.1907/2006 concerning the Registration, Evaluation, Authorization and Restriction of Chemicals (REACH): The product does not contain substances that meet the PBT (persistent/bioaccumulative/toxic) criteria or the vPvB (very persistent/very bioaccumulative) criteria

12.6. Endocrine-disrupting properties

The product does not contain any substance identified as having endocrine disrupting properties above the legal limits, in accordance with the criteria established in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605. The product does not contain any substance above the legal limits included in the list established pursuant to Article 59 (1), of Regulation (EC) No. 1907/2006 to have endocrine disrupting properties or identified as having endocrine disrupting properties, in accordance with the criteria established in Commission Delegated Regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605.

12.7. Other adverse effects

The product is insoluble in water, has very low volatility and has no harmful effect on the environment.

13. DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

This product has been classified as a non-hazardous waste. Dispose of waste and residues in accordance with local authority requirements. May be buried on an authorised landfill site or incinerated above 800°C.

Please refer to the European Waste Code (EWC-2000/532/EC and amendments) to assign the correct waste code.

14. TRANSPORT INFORMATION

Transport in accordance with CDG-CPL/ADR for road, RID for rail, IMDG for sea and ICAO-IATA for air. Not classified as hazardous for carriage under the above regulations.

UN-N°: Not applicable

Page Number:	8/8
Revision N°:	6
Revision date:	10.01.2023
Supersedes date:	12.10.2019

15. REGULATORY INFORMATION

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

Carcinogenicity

Ingredient	CAS N.	Classification	Regulation
Polytetrafluoroethylene (homopolymer)	9002-84-0	Gr. 3: Not classifiable	International Agency for Research on Cancer

Comply with REACH Regulation 1907/2006, RoHS Directives 2011/65/EU and 2015/863, CLP Regulation as amended with EC Regulation n.830/2015 and EC Regulation n.878/2020.

15.2. Chemical Safety Assessment

According to Directives 2008/1272/EC and 2010/453/EC (Hazard Information and Packaging for Supply):
Not applicable

16. OTHER INFORMATION

Revision information:

Section updates in this revision

- Section 1 (1.3)
- Section 2 (2.3)
- Section 11 (11.1)
- Section 12 (12.5; 12.6)

The information herein is based on data considered to be accurate as of the date of preparation of the Material Safety Data Sheet. However, no warranty or representation, expressed or implied, is made as to the accuracy or completeness of the foregoing data and safety information. The use assumes all liability for any damage or injury resulting from abnormal use, from any failure to adhere to recommended practices or from any hazards inherent in the nature of the product.