

# PTFE sealing technologies

01/2020-EN

# Safety Information

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#### 0. GENERAL INFORMATIOM

This product is a product as defined in article 3.3 of regulation (EG) No. 1907/2006 (REACH).

A safety data sheet does not need to be supplied for these products, as this is not required according Article 31 for products but only for dangerous substances and preparations.

KWO Dichtungstechnik GmbH provides this safety information for a risk assessment according §6, para. 2, German Ordinance on Hazardous Substances.

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

Identification of the preparation: KWO ePTFE sealing materials:

TYPE: KWO Universal Tape F, Premium, KWO Universal Tape F,

KWO Universal Tape R, KWO Universal Tape HD,

KWO CellFlon Tape, KWO CellFlon Tape R, KWO CellFlon Tape CL,

KWO CellFlon Sheet Blue, KWO CellFlon Sheet Brown,

KWO CellFlon Sheet White,

KWO MultiTex Sheet, KWO MultiTex Sheet HD, KWO MultiTex Ring, KWO MultiTex Ring DK, KWO MultiTex Tape, KWO MultiTex Tape DK

Supplier: KWO Dichtungstechnik GmbH

Am Eschengrund 3

83135 Schechen, Germany

Phone number: +49 08039 90254-0

2. HAZARDS IDENTIFICATION

Most important hazards: None

Specific hazards: Thermal decomposition produces hazardous vapours which can causes

so-called polymer fever with flu-like symptoms.

3. COMPSITION / INFORMATION ON INGREDIENTS

Chemical nature of the preparation: Polytetrafluoroethylene (PTFE)

4. FIRST AID MEASURES

Inhalation: Move to fresh air in case of accidental inhalation of fumes from overheating

or combustion. Consult a physician after significant exposure.

Skin contact: Cool skin rapidly with cold water after contact with molten polymer. Do not

peel polymer from the skin. Obtain medical attention.

Eye contact: Rinse with water.

All technical information and advice given here is based on our previous experiences and/or test results. We give this information to the best of our knowledge but assume no legal responsibility. Customers are asked to check the suitability and usability in the specific application, since the performance of the product can only be judged when all necessary operating data are available. Specifications are subject to change without notice. KWO's terms and conditions of sale apply to the purchase and sale of the product.



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5. FIRE-FIGHTING MEASURES

Suitable extinguishing media: Water, carbon dioxide (CO<sub>2</sub>), foam, dry powder

Special protective equipment for fire-fighters: In the event of fire, wear a self-contained breathing apparatus and a

complete suit protecting against chemicals.

Wear neoprene gloves when handling refuse from a fire involving PTFE

materials.

6. ACCIDENTIAL RELEASE MEASURES

Personal protections: None

Methods for cleaning up: Sweep-up to prevent slipping hazard.

7. HANDLING AND STORAGE

Handling

Technical measures / precautions: None under normal processing. The solid polymer can be combusted only

with difficult.

Precautions: Provide appropriate exhaust ventilation at processing equipment when

heated > 300 °C.

Safety handling advice: None

Storage

Technical measures / Storage conditions: None Storage conditions: None Incompatible products: None Packaging material: None

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# 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Personal protective equipment

Eye protection: Use the prescribed operational protection equipment. Hand protection: Use the prescribed operational protection equipment.

Hygiene measures: Do not contaminate tobacco products. Do not smoke. Wash hands before

breaks and at the end of workday. General precaution for all plastics and

elastomers: Do not breathe fumes evolved from hot polymer.

Control parameters

Inhalable fraction/ A-dust 1,25 mg/m<sup>3</sup> Respirable fraction/ E-dust:  $10 \text{ mg/m}^3$ 

1 ml/m<sup>3</sup> (ppm) or rather 0,83 mg/m<sup>3</sup>, peak limit Hydrogen fluoride:

Carbonyl fluoride: TLV-TWA = 2 ppm; TLV-STEL = 5 ppm; ACGIH (1999)

LC50/inhalation/1h/rat = 360 ml/m3; RTECS, 25044

### 9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance** tested according to:

Form: sheets or tapes

Colour: white Odour: none

PH (°C): not applicable

327 - 342°C Melting point / range: **ASTM D1457** 

Decomposition temperature: >300°C

Flash point: not applicable **ASTM D1929** 

Autoignition temperature: >500°C Explosive properties: not applicable

Relative density of the raw material: from 2,14 g/cm³ to 2,23 g/cm³ (23°C) ASTM D792

from 0,35 g/cm³ to 2,8 g/cm³ (23°C) Nominal density:

Water solubility: insoluble

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10. STABILITY AND REACTIVITY

Conditions to avoid: Temperatures above 300°C

Materials to avoid: Aluminium powder, magnesium powder, halogenated compounds,

oxidising agents (strong), alkali metals

Hazardous decomposition products: fluorinated olefins, carbonyl fluoride, hydrogen fluoride

Further information: Product resists ignition and does not promote flame spread.

02 -Index - ASTM D2863: >95%

11. TOXICOLOGICAL INFORMATION

No data available Acute toxicity:

Local effects: The thermal decomposition vapours of fluorinated polymers may cause

polymer fume fever with flu-like symptoms in humans. Symptoms usually

appear after 2 hours and decline within the next 36 to 48 hours.

No persistent or cumulative effects were observed.

12. ECOLOGICAL INFORMATION

No data available

13. DISPOSAL CONSIDERATIONS

Unused products: Like most thermoplastic plastics the product can be recycled. Where

possible recycling is preferred to disposal or incineration.

Can be landfilled, when in compliance with local regulations. Can be Used products

incinerated using a scrubber to remove hydrogen fluorine, when in

compliance with local regulations.

Waste code number: 070213

Empty containers should be taken for local recycling, recovery or waste Packaging

disposal.

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#### 14. TRANSPORT INFORMATION

Not classified as dangerous in the meaning of transport regulations.

### 15. REGULATORY INFORMATION

Water hazard class: Not hazardous to water

identification no.: 766

Other regulations: Directive 98/24/EC on the protection of the health and safety of

workers from the risks related to chemical agents at work.

This product does not require classification according to the relevant

German legislation (Ordinance on Hazardous Substances).

# 16. OTHER INFORMATION

Before use read KWO's installation and safety information.

Do not use in medical applications involving permanent implantation in the human body.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific materials designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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