

Safety data card in conformity with the EEC 91/155 DirectiveProduct Line : **Braid for packing seals - N 3404****1. DENOMINATION OF THE PRODUCT AND OF THE COMPANY**

Indications on the product :

Braid manufactured by yarn in polyester fiber (PES) with complete impregnation of polymeric PTFE and inert paraffinic lubricant

Data relevant to the producer : CARRARA

via provinciale 1E

25030 Adro- BS - Italy

Telephone Nr. (+39) 030 7451121 telefax (+39) 030 7451130

2. COMPOSITION/INFORMATION ON THE COMPONENTS

Chemical characterization:

- Polyester synthetic fiber (PES), PTFE impregnant polymer and paraffinic running-in oil
- free from substances considered dangerous for the health

3. IDENTIFICATION OF THE DANGERS

- The polyester fiber and the PTFE polymer have never evidenced risks for the human health and for the environment
- Risks present themselves for the presence of the PTFE when the product is brought to temperatures superior to 400°C above which starts the emission of toxic compounds (HF and COF₂) which are not immediately visible but are extremely corrosive and can cause serious burns

4. FIRST AID MEASURES

- further to inhalation of decomposition products, bring the injured person in the open air and keep him calm and request intervention of a doctor
- **Indications for the doctor** : symptoms, for inhalation to decomposition products the following symptoms can occur : temperature, breathing insufficiency, cough, shivers

The product starts to decompose itself thermally at T >300°C ; specific interventions are necessary in case of contact with the decomposition products when we have temperatures of T > 400°C :

Contact with the eyes

- rinse immediately with running water for at least 15 minutes until intervention of the doctor
- request prompt intervention of a doctor

Contact with the skin

- wash immediately with water and soap carefully rinsing between the folds of the skin and under the nails
- request prompt intervention of a doctor

Inhalation

- bring the subject in the open air and if possible give oxygen
- if breathlessness occurs effect artificial respiration, preferably mouth to mouth
- request prompt intervention of a doctor and keep under observation for at least 48 hours

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5. ANTIFIRE MEASURES

Suitable means for extinction : - Water

- Foam
- Extinguishing powder
- Carbon dioxide

The risks in case of fire are connected to the combustion products which are :

- Carbon monoxide/dioxide (CO and CO₂)
- Hydrofluoric acid (HF)
- Carbonyl fluoride
- Tetrafluoroethylene
- Hexafluoropropylene
- Perfluoroisobutylene

Particular protection equipment for the antifire operations :

- it is peremptory, for the extinguishing, rescue and clearing operations in presence of combustion and distillation gases, to use a breathing apparatus for secure protection of the respiratory tract

Other indications :

the fluoropolymers can increase the relative toxicity of the combustion gases

6. MEASURES IN CASE OF ACCIDENTAL LEAKAGE

Cleaning/collecting measures

- collector with mechanical equipment
- dispose in conformity with the Local regulations and laws

7. HANDLING AND WAREHOUSING

Handling

- avoid temperatures superior to the decomposition start temperatur (T > 300°C)

Warehousing

- keep away from ignition sources

8. LIMITATION OF THE EXPOSURE/INDIVIDUAL PROTECTION

Individual protection

- General protection measures : do not breath steams and powders in case they are generated, in such cases **Do not smoke during work**

9. PHYSICAL AND CHEMICAL PROPERTIES

Aspect :
- Shape : solid braided compact
- Colour : white
- Odour : odourless

Important data for the safety

Modifications of the physical state : melting point 250/260 °C

- Method : ASTM D 4895
- Flammability point : not applicable
- Ignition temperature: 515°C DIN 51794

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- Inferior explosivity limit : not applicable
- Steam tension : not applicable
- Density: 1,8 g/cm³ (indicative)
- Solubility in water : insoluble
- pH value : not applicable
- Viscosity : not applicable

10. STABILITY AND REACTIVITY

- Thermal decomposition: T > 300°C - Method : thermogravimetry
- Dangerous reactions with : strong oxidants, melted alkaline metals, partial reactivity with a few interhalogen compounds, avoid applications in acid and basic environments at pH above the 2 ÷ 12 field
- Dangerous decomposition products : Carbon monoxide/dioxide, Hydrofluoric acid, Carbonyl fluoride, Tetrafluoropropylene, Hexafluoropropylene and Perfluoroisobutylene

11. INDICATIONS ON THE TOXICOLOGY (Observations)

- As by pluriannual experiments no harmful effects are known if the product is used correctly

12. INDICATIONS FOR THE ECOLOGY (Observations)

- The product is not water-soluble
- The material does not have harmful effects on the environment

13. INDICATIONS FOR THE DISPOSAL

- In respect of the set of rules in force in the matter and after having contacted the person in charge of the disposal and the competent authorities the product can be deposited in a dump or incinerated together with the city rubbish
- The hydrofluoric acid must be eliminated by alkaline washing of the combused gases

14. INDICATIONS ON THE TRANSPORT

Transport by overland

- ADR GOODS NOT DANGEROUS
- RID GOODS NOT DANGEROUS

Water transportation

- ADNR GOODS NOT DANGEROUS

Transport by sea

- IMDG/UN GOODS NOT DANGEROUS

Transport by air

- ICAO/IATA-dgr GOODS NOT DANGEROUS

Shipment by mail

- Allowed

15. SET OF RULES

EEC 67/548 Directive

- Type of Classification : none

Labelling :

- Classification : not requested
- Danger symbol : not requested
- Risk phrases : not requested

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- Safety phrases : not requested

DPR 303/56 (General rules for the working hygiene) : not mentioned

16. OTHER INFORMATIONS

These informations are based on the actual level of our knowledge and the ones supplied by the manufacturing companies of the components of our products. Their aim is to describe our product under the safety aspect and does not have the intent to guarantee determining specific properties of the product itself.