






S.p.a Packings & Gaskets

Safety data card in conformity with the EEC 91/155 Directive

Product Line: **PACKING - PT 5504/L - NR. 0200/00**

### PT5504/L

				
T	°C	-200 +280		
p	bar	20	100	50
V	m/s	1	2	8
Ph		0 ÷ 14		

• Do not use the product to the values of associate maximum temperature and pressure without consulting the producer.

#### *Composition*

- Virgin PTFE yarn
- PTFE emulsion
- Silicon lubricant

#### *Features*

The packing PT5504/L is braided with purest virgin PTFE yarn in the thinnest wires. The Packing is subordinate to a double process of impregnation, by means of impregnation directed on every single filament and later on by means of one impregnation in PTFE emulsion and silicon lubrication.

#### *Applications*

For dynamic applications, where the high chemical resistance it needs.



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## 1. DENOMINATION OF THE PRODUCT AND OF THE COMPANY

### Indications on the product:

The PT 5504/L is braided with the poly-tetra-fluor-ethylene polymer – pure PTFE 100% - yarns and completely impregnated with an emulsion of PTFE and silicon lubricant.

## 2. COMPOSITION/INFORMATION ON THE COMPONENTS

Chemical characterisation: PTFE packing.

- 100% PTFE polymer, base yarn polymerised and impregnation in powder, lubrication with silicon oil.
- free from substances dangerous for the health

## 3. IDENTIFICATION OF THE DANGERS

- The polymer PTFE in its various conformations (solid, in powder, etc.) has never evidenced risks for the human health nor for the environment.
- Risks present themselves when the product is brought to temperatures superior to 400°C for the emission of toxic compounds (HF and COF<sub>2</sub>) 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  
Interventions in case of contact with the compounds of the thermal decomposition (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

## 5. FIRE SAFE

Suitable means for extinction:

- Water
- Foam
- Extinguishing powder
- Carbon dioxide



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

- Carbon monoxide (CO)
- Hydrofluoric acid (HF)
- Carbonyl fluoride
- Tetrafluoroethylene
- Hexafluoropropylene
- Perfluoroisobutylene

Particular protection equipment for the fire safe 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 fluoro-polymers 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 the high temperatures near or superior to the decomposition start temperature ( $T > 400^{\circ}\text{C}$ )

Warehousing.

- Keep away for ignition sources

## 8. LIMITATION OF THE EXPOSURE AND INDIVIDUAL PROTECTION

- Individual protection.
- General protection measures: do not breath steams and powders in case they are generated, in such case do not smoke during the work

## 9. LIMITATION OF THE EXPOSURE AND INDIVIDUAL PROTECTION

Aspect: - Shape: solid braided compact

- Colour: white

- Odour: odourless

Important data for the safety

Modifications of the physical state: melting point of the crystalline from 320 up to 345°C

- Method : ASTM D 4895
- Flammability point : not applicable
- Ignition temperature:  $> 500^{\circ}\text{C}$  - Method : ASTM D 1929
- Inferior explosively limit : not applicable
- Steam tension :  $\leq 5\text{mm}$  / the PTFE fibre cannot be vaporised
- Density: 1,8 g/cm<sup>3</sup> at room temperature
- Solubility in water : insoluble
- pH value : not applicable



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- Viscosity : not applicable

#### **10. STABILITY AND REACTIVITY**

- Thermal decomposition: T  $\geq$ 400°C - Method : thermogravimetry
- Dangerous reactions with : strong oxidants, elementary fluorine, melted alkaline metals and partial reactivity with a few halogen compounds
- Dangerous decomposition products : Hydrofluoric acid, Carbonyl fluoride, Tetrafluoropropylene, Hexafluoropropylene and Perfluoroisobutylene

#### **11. INDICATIONS ON THE TOXICOLOGY (Observations)**

- After many tests 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 gases

#### **14. INDICATIONS ON THE TRANSPORT**

- The material is not dangerous in any case.

#### **15. SET OF RULES**

EEC 67/548 Directive

- Type of Classification : none Labelling:
- Classification : not requested
- Danger symbol : not requested
- Risk phrases : not requested
- Safety phrases : not requested

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

#### **16. SET OF RULES**

- These information 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.