**SAFETY DATA SHEET** **PTFE** **-Rev. 01**

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| | **PTFE** | |
| PRODUCT NAME: | **Semifinished PTFE Products** | Code Nr |

## 1. CHEMICAL PRODUCT/COMPANY IDENTIFICATION

| | | CAS Number | % |
|---|---|---|---|
| 1.1 | Material Identification: | | |
| | POLYTETRAFLUOROETHYLENE | 9002-84-0 | 100 |

1.2 Company Identification:

Manufacturer/Distributor

GAPI s.r.l.
via Marconi 108
I 24060 Castelli Calepio (BG), ITALY
ph +39 035 84 70 84
fax +39 035 84 84 67

1.3 UK Distributor:

theplasticshop.co.uk
16 Bayton Road
Coventry, CV7 9EJ
UK

## 2. COMPOSITION/INFORMATION ON INGREDIENTS

2.1 Material: PTFE ( POLYTETRAFLUOROETHYLENE )

## 3.HAZARDS IDENTIFICATION

3.1 The primary hazard associated with these polymers is the inhalation of fumes from overheating or burning Heating PTFE above 300 degrees C may liberate a fine particulate fume

3.2 Polymer fume fever, a temporary flu-like condition with fever chills, nausea, shortness of breath, chest tightness, muscle or joint ache.

3.3 The symptoms are often delayed 4 to 24 hours after exposure. These signs are generally temporary, lasting 24-48 hours and resolve without further complications.

3.4 However, some individuals with repeat episodes of polymer fume have reported persistent pulmonary effects. Exposure to decomposition products from PTFE heated above400 degrees C may cause pulmonary inflammation, hemorrhageor oedema.

3.5 These more serious consequences of exposure may occur from extreme thermal decomposition of PTFE witch can liberate fume particles, and toxic gases especially under condition of poor ventilation and/or confined spaces.

3.6 These decomposition products may initially produce chest tightness or pain, chills, fever, nausea, with shortness of breath, cough, wheezing and progression into pulmonary oedema.

## 4. FIRST-AID MEASURES

4.1 Inhalation:

Polymer fume fever, a temporary flu-like condition with fever chills, nausea, shortness of breath, chest tightness, muscleor joint ache.

No specific intervention is indicated as the compound is not likely to be hazardous by inhalation. Consult the physician if necessary. If exposed to fumes from over heating or combustion, move to fresh air. Consult the physician if symptoms persist.

4,2 Skin contact: Irritation, pain or blurred vision may result.

The compound is not likely to be hazardous by skin contact, but clean sing the skin after use is advisable. If molten polymer get son skin, cool rapidly with cold water. Do not attempt to peel polymer from skin. Obtain medical treatment for thermal burn.

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| 4.3 Eye contact Irritation, pain or blurred vision may result. | In case of contact, immediately flush eyes with plenty of water. Call a physician |
| 4.4 Ingestion: No toxic. | No specific intervention is indicated as compound is not likely to be hazardous by ingestion. Obtain medical attention if necessary. |

## 5.FIRE-FIGHTING MEASURES

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| 5.1 Extinguishing Media: | As appropriate for surrounding materials/equipment. |
| 5.2 Equipment: | Wear self-contained apparatus. Wear full protective equipment (antacid). Hydrogen fluoride fumes emitted during afire can react with water to form hydrofluoric acid. |
| 5.3 Risk: | If a flame is applied to the material it will ignite but if the flame isremoved then combustion ceases. Combustion or thermaldecomposition will evolve very toxic and corrosive vapours(example HF e $COF_2$) |

## 6. ACCIDENTAL RELEASE MEASURES

6.1 No risk.

## 7. HANDLING AND STORAGE

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| 7.1 Handling | Usual protective clothing must be worn<br>Avoid to use material at high temperature (280°C) a nd Care should be taken to prevent inhalation of fume When using do not smoke |
| 7.2 Storage | Extra care should be taken to prevent burns from contact with hot material, contact with hot surface and with naked flames |

## 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Occupational Exposure limits during thermal decomposition of material

| | | |
|---|---|---|
| Hydrofluoric acid (HF) | TLV = 2,6mg/m3 | (Threshold Limit Value) |
| Carbonyl fluoride (CO F2) | TLV = 5,4 mg/m3 | (Threshold Limit Value) |

8.2 Personal Protection Inhalation

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| Eye/Face protection : | Wear safety glasses. Wear coverall chemical splash goggles and face shield whenpossibility exist for eye and face contact to splashing or spraying of moltenmaterial. |
| Body: | Wear heat resistant clothing and footwear. |

8.3 Engineering Controls

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| Ventilation | Use local ventilation exhaust to completely remove vapours and fumes liberatedduring processing from the work area. |

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## 9. PHYSICAL AND CHEMICAL PROPERTIES

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|---|---|
| Form | Solid tubing |
| Density | 2,17 gr/cm3 |
| Melting Point | 327/335℃ |
| Explosion | Not |
| Solubility | Not in water or in organic solvent |

## 10.STABILITY AND REACTIVITY

10.1 Stable at normal temperatures and storage conditions.
10.2 Extra care should be taken to prevent heating up 350℃, to prevent burns from contact with flame s hot material, contact with hot surface and naked

## 11.TOXICOLOGICAL INFORMATION

11.1 In usual condition harmful effects for man are not knowed.
11.2 PTFE has not cangerogenic effect.
11.3 The thermal decomposition products are toxic

## 12. ECOLOGICAL INFORMATION

12.1 No risk of environmental pollution.
12.2 When PTFE is burned decomposition products begin to be emissioned.

## 13. WASTE DISPOSAL

13.1 No specific risk. If possible to recycle is suggested.
13.2 Treatment, storage, transportation, and disposal must be in accordance with applicable federal, state/provincial, and local regulation.

## 14. TRANSPORT INFORMATION

14.1 Not classified as Hazardous for transport. Only risk is when PTFE burns.

## 15. REGULATORY INFORMATION

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| 15.1 | Regulation CEE | Directive CEE 67/548 and subsequent amendments |
| 15.2 | Italian Regulation | DPR 303/56 Health controls |

## 16.OTHER INFORMATION

The data sheet was prepared in accordance with the Directive CEE 91/155