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Date: 2000-01-01

Material Safety Data Sheet

COMMERCIAL PRODUCT NAME

PTFE tube.

CHEMICAL CHARACTERIZATION

Polytetrafluorethylene (PTFE).

PHYSICAL AND SAFETY DATA

Melting point:

Density:

Ignition temperature:

Hazardous decomposition products:

Hazardous reactions:

324 - 327 °C

 $2.13 - 2.17 \text{ g/cm}^3$

> 500 °C

fluorinated olefins, carbonylfluoride, hydrogene fluoride. with magnesium or aluminium powder at > 425 °C, with

molten alkali metals or with interhalogen compounds.

TRANSPORTATION

Not a dangerous good in the meaning of the transport regulations.

REGULATIONS

The product does not need to be labeled according to the EC-Directive 67/548 as amended.

PROTECTIVE MEASURES

Provide appropriate exhaust ventilation at processing equipment (molten polymer).

Use safety glasses and heat insulating gloves.

Do not contaminate tobacco products. General precaution for all plastic and elastomers.

Do not breathe fumos evolved from hot polymer.

Product resists ignition and does not promote flame spread. Oxygen index is 95%.

Can be landfilled, when in compliance with local regulations.

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MEASURES IN CASE OF ACCIDENTS AND FIRES

Extinguishing media;

water, dry sand, foam, dry powder.

Inhalation:

move to fresh air and 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.

Eye contact: Ingestion: rinse with water.

Other:

No adverse effects.

Approximate Lethal Temperature (ALT) of PTFE is 400 °C.
ALT is the temperature at which decomposition products killed at least one rat out of four, after a four hour exposure. In case of fire, wear a self-contained breathing apparatus and a complete suit protecting against chemicals. Wear Neoprene goloves when handling

refuse from a fire.

INFORMATION ON TOXICITY

Inhalation of thermal decomposition products from polymer (e.g. through smoking contaminated tobacco) may cause "polymer fume fever", producing flu-like symptoms in humans. The symptoms do not ordinarily occur until about two hours or more after exposure, and pass within 36 to 48 hours. Experience indicates that there is no long lasting nor cumulative effect.

Occupational exposure limits:

respirable dust:

8-h TWA = 5 mg/m³

Hydrogen fluoride (as F):

8-h TWA = 3 mg/m² = 2,5

 $10 - m TWA = 6 m l/m^3 = 5 mg/m^3$

This data relates only to the product designated herein and does not apply to use in combination with any other product or in any process. The data is not to be considered as a warranty or qauality specification and we assume no liability in connection with its use.