

SHATTER RESISTANT SLEEVING ON U.V. LAMPS

MATERIAL SAFETY DATA SHEET

1. IDENTIFICATION OF SUBSTANCE OR PREPARATION

COMPANY UNDERTAKING IDENTIFICATION

Bower Products Limited
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Wembley, Middlesex.
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PRODUCT

UVC-375 is a highly flame retarded, themofit heat-shrinkable polymeric thin-wall tubing with excellent clarity. It is manufactured from a modified fluoropolymer whose properties include toughness, chemical resistance, and high temperature performance. Special required features are exceptionally clear, non discolouration from Ultra Violet light, excellent abrasion resistance, a 2:1 shrink ration and an operating temperature of -55°C to + 150°C.

TYPICAL APPLICATIONS

Used for the protection of Ultra Violet and non Ultra Violet fluorescent lamps which may be subject to abuse and breakage in high risk areas such as food preparation areas, public areas, clean areas etc, where any risk of contamination from broken glass, phosphorous or associated chemicals is unacceptable. It allows full protection and inspectability of the covered item without losing the ability to identify the part.

APPROVALS

UL224 (150°C) VW-1 MIL +23053/18

PRODUCT SUMMARY

Clear and flame retarded
UL224 (150°C)
Exceptionally clear
Excellent Abrasion resistance

2. COMPOSITION INFORMATION ON INGREDIENTS

CHEMICAL DESCRIPTION

Plastic materials may be based on polythene and olefin copolymers, chloropolymers, fluoropolymer's, polyamides, polyesters and silicones. Products may be coated with or used in conjunction with adhesives/mastics based on polyamides and/or olefin copolymers.

3. HAZARDS IDENTIFICATION

This safety data sheet applies to a group of products which are not hazardous as supplied and do not present any significant risk to health because they are used in accordance with the manufacturers product instructions. Products may emit hazardous thermal decomposition products if overheated or burnt.

4. FIRST AID MEASURES

EYES

If molten adhesive contacts the eyes, flush with water for at least 15 minutes, holding eyelids open. Seek medical attention

SKIN

if molten adhesive contacts the skin, cool immediately with cold water. Treat as a burn. Do not attempt to remove material adhering to the skin. Seek medical attention.

INGESTION

Seek medical attention

INHALATION

If exposed to fumes from overheated or burnt material, move the patient to fresh air. Keep warm and at rest. Seek medical attention if breathing problems develop.

5. FIRE FIGHTING METHODS

EXTINGUISHING MEDIA

Water fog, dry powder, carbon dioxide, foam.

FIRE AND EXPLOSION HAZARDS

Toxic fumes may be evolved in a fire.

PROTECTIVE METHODS

Fire fighters should wear self-contained breathing apparatus with full facepiece and protective clothing.

NB: Care should be taken when handling fire damaged fluoropolymer based products. Neoprene gloves should be worn to avoid skin contact with potentially highly corrosive residues which may contain hydrofluoric acid. Equipment in contact with degraded products should be washed with calcium hydroxide solution. Gloves, wipes and residues should be neutralized with calcium hydroxide solution before disposal.

6. ACCIDENTAL RELEASE MEASURES (SPILLAGES)

PERSONAL PRECAUTIONS

Not Applicable

ENVIRONMENTAL PRECAUTIONS

Not Applicable

RECOVERY

Pick up for re-use or disposal

7. STORAGE AND HANDLING (IN NORMAL USE)

STORAGE

Cool, dry warehouse environment. Store in packaging and away from direct sunlight.

VENTILATION

Use general and/or local exhaust ventilation of the workplace. When using gas torches in confined spaces ensure an adequate supply of fresh air to avoid oxygen depletion.

HANDLING

Avoid overheating the product after shrinkage has occurred. If the product blisters, chars or shows any other signs of degradation, stop heating immediately. Avoid inhaling fumes which may be evolved and ventilate the area thoroughly before resuming work.

Avoid contact with molten materials, and any residues from fire damaged products.

8. EXPOSURE CONTROL/PERSONAL PROTECTION (NORMAL USE)

OCCUPATIONAL EXPOSURE LIMITS

Not Applicable

PERSONAL PROTECTIVE EQUIPMENT

RESPIRATORY

Not required under normal circumstances.

HAND

Heat resistant gloves may be required to manipulate hot products after installation.

If it is necessary to handle fire-damaged products, neoprene gloves should be worn to avoid skin contact with potentially highly corrosive residues.

EYE

Safety glasses/goggles or face-shield, depending on the application.

9. PHYSICAL/ CHEMICAL PROPERTIES

APPEARANCE

Plastic tubing and moulded parts in a variety of shapes, sizes and colours.

ODOUR

No distinct odour.

PH (AS DELIVERED)

Not Applicable

MELTING POINT (°C)

Adhesives 70-170

BOILING POINT (°C)

Not Applicable

FLASH POINT (°C)

Not Applicable

RELATIVE SELF-IGNITION TEMPERATURE

No relevant data available

EXPLOSIVE PROPERTIES

UPPER LIMIT (%)

Not Applicable

LOWER LIMIT (%)

Not Applicable

RELATIVE DENSITY (20 °C)

0.9-2.2

SOLUBILITY IN WATER (20 °C)

Insoluble

10. STABILITY AND REACTIVITY

STABILITY

Stable

CONDITIONS TO AVOID

Avoid overheating products beyond temperatures required for normal installation.

MATERIALS TO AVOID

None known

HAZARDOUS DECOMPOSITION PRODUCTS

Thermal decomposition is not significant as products are installed according to manufacturers instructions. At higher temperatures and if materials burn, thermal decomposition products will depend on the base polymers used. Thermal decomposition products may include, but not be limited to alcohols, aldehydes, carbon dioxide, carbon monoxide, carboxylic acids, fluorinated hydrocarbons, hydrocarbons, hydrogen bromide, hydrogen chloride, hydrogen fluoride, silicone dioxide and oxides of nitrogen, phosphorus and sulphur.

11.TOXICOLOGICAL INFORMATION

ACUTE EFFECTS

EYES

Overheating products during installation may produce fumes that can cause irritation, redness and watering of the eyes.

SKIN

These products would not be expected to cause irritation, or present a hazard to health through skin absorption. Contact with molten material may cause thermal burns. Fire damaged products may contain highly corrosive residues.

INGESTION

Not a normal route of exposure.

INHALATION

Overheating products during installation may produce fumes that can cause irritation of the upper respiratory tract, headache, dizziness, nausea and, in the absence of ventilation, possible asphyxiation.

Inhaling thermal decomposition products of fluoropolymers may produce symptoms similar to influenza.

CHRONIC EFFECTS

None known.

12.ECOLOGICAL INFORMATION

MOBILITY

No relevant data available

PERSISTENCE AND DEGRADABILITY

Products are resistant to bio-degradation

BIO-ACCUMULATION

No relevant data available

AQUATIC TOXICITY

No relevant data available

13.DISPOSABLE CONSIDERATIONS

Landfill or incinerate at an approved site in accordance with local and national regulations. For incineration use a high temperature incinerator equipped with secondary combustion chamber and acid gas scrubber.

14.TRANSPORTATION INFORMATION (REGULATIONS)

PACKAGING (SIZE AND DESCRIPTION)

Packaging used for supply will depend on product type

TRANSPORT CLASSIFICATION

Non-hazardous

OTHER INFORMATION

Not restricted for any mode of internal transport

15.REGULATORY INFORMATION (SUPPLY AND LABELLING)

SUPPLY CLASSIFICATION

Not considered as dangerous preparations in the context of EC Council Directive 88/379/EEC

HAZZARD PICTOGRAM

Not Applicable

RISK PHRASES

Not Applicable

SAFETY PHRASES

Not Applicable

16.OTHER INFORMATION

Users are advised to ensure that this information is brought to the attention of the employees, agents or contractors handling this product. Distributors of this product are advised to forward this document, or the information contained herein, to their purchaser.

The information contained herein is based on the present state of our knowledge and it is intended to describe our products from the point of view of safety requirements. It should not therefore be construed as guaranteeing specific properties.

Users of the products should make their own evaluation to determine the suitability of each such product for the specific application and to establish safe handling and installation procedures.
