



# UFLEX LIMITED

(Formerly known as Flex Industries Limited)

A-1, SECTOR - 60, GAUTAM BUDH NAGAR, NOIDA - 201 301 (U.P.) INDIA  
PHONE : 0091-120-2580500, 3982121, 4002121  
FAX : 0091-120-2580003, 2580422, 2580152, 2580322



Ref: MSDS/IMF/0801

Issue Date : 20.08.08

## ( Material Safety Data Sheet - MSDS )

### 1.) Identification of the Product and Manufacturer

#### Product Details

Trade Name: FLEXMETPROTECT™  
Manufacturer Details: UFLEX LIMITED  
Address: A-1,SECTOR-60,NOIDA – 201301  
(U.P), INDIA  
Telephone: +91 120-3982121, 3982535, 3982658  
Fax: +91 120-2580152, 2580511, 2580003

### 2.) Composition/Information on Ingredients

Component: Polyethylene terephthalate > 99.0% , Aluminium < 0.1%  
Substance:  
Chemical Name: Aluminium metallized polyethylene Terephthalate and its co-polymer  
Synonyms: Bi axially oriented Polyethylene terephthalate (PET)  
Chemical classification: Engineering Plastics  
Formula: Polyethylene terephthalate Homo polymer, -(C10H8O4)n- (min.90%)  
CAS NO.: 25038-59-9 (polyethylene -terephthalate) , 7429-90-5 (Aluminium)

### 3.)Hazard Identification

Skin contact: No significant irritation expected in normal conditions of use. The contact with hot molten material may cause severe burns.  
Eye contact: Eye contact is not expected during normal use of product. If heated to higher temperature (>260°C) the product may form vapors or fumes which may cause irritation to eyes.  
Ingestion: Material is biologically inert and has no risk of ingestion in normal use, in case injected please seek medical advice.  
Environmental Impact: Non biodegradable, non compostable  
Physico-chemical hazards: The material is combustible if exposed to flames, handling of material may create electrical charges and spark which may be cause of ignition for other flammable material.

### 4.) First Aid Measures

Root of Exposure:  
Inhalation: Fumes and vapors produced by heated or burnt material may be irritating for the respiratory track. Bring patient into fresh air, get medical advice if the symptoms continue.  
Skin contact: Exposure to hot molten material. In this case: Rinse with plenty of water. Do NOT remove clothing (risk of sticking to skin) or do not try removing adhering material.  
Injured area should be treated as burns.  
Eye contact: Seek medical advice immediately. However, use of protective gloves/clothing is good industrial practice  
Exposure to hot molten material. In this case: Rinse with plenty of water. Seek immediate special treatment at hospital or medical center in case of irritation caused by vapors or fumes wash with water and seek medical advice.



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## 5.) Fire-Fighting Measures

Fire Class Regulation	A type
Technical measures	Stop the fire spreading, call the Fire brigade immediately, evacuate non-essential personal. Protective clothings, goggles and self contained breathing equipment should be made available for fireman.
Suitable Extinguishing media:	Water mist only to cool the surface exposed to fire, carbon dioxide, foam, Halon, AFFF(Aquous film forming foam)
Not to be used	Do not use water jets for estinquishing fire,since they could help to spread the flames.
Hazardous combustion products:	Carbon monoxide, carbondioxide,alcoholals,acetaldehydes,organicacids,aluminium fumes,aluminium oxides.
Special fire fighting instruction:	Equipment should be throughly decontaminated after use.

## 6.) Accidental Release

Methods for cleaning/removal	Pick up mechanically. Dispose according to local and National regulations.
Environmental	Keep out of drains and water sources.

## 7.) Handling and Storage

Handling	<p>Handle in accordance with good industrial hygiene and safety practices.</p> <p>Keep away from ignition sources.</p> <p>Observe the general rules of industrial fire protection.</p> <p>Keep original wrapping on the film until it is used. In case the roll is partially used, the balance roll should be preserved on the standard packing with sticker.</p> <p>Film rolls should be moved only with equipment designed for the purpose as film rolls and pallets are heavy. Film edges are sharp and may cause cuts/wounds, handle with most care.</p>
Storage:	<p>Store in cool, dry place at an ambient temperature (preferably 25°C with Relative Humidity of 50%) in a closed shed.</p> <p>Use FLEXMETPROTECT™ (METALLIZED PET FILM) film by FIFO system &amp; it is advised to rotate the film stock. It is advised to consume the material within six months from the date of manufacturing.</p> <p>Keep packages closed to prevent contamination.</p>

## 8.) Exposure Controls/Personal Protection

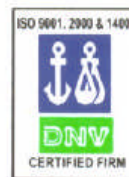
Exposure controls:	
Occupational Exposure control	Standard usage condition of material do not generate the dust particles.The following values apply to nuisance dust which may be gormed while cutting,girnding ,stamping.Total dust : 10 mg/m3
Respiratory protection / ventilation	In case of risk of exposure to dust, vapour or fumes generated by thermal decomposition of the material ,it is recommended that a local exhaust system is placed above the converting equipment (hood) and the working area mu8st be properly ventilated.
Skin & Body & Eye protection	If contact with hot molten material is possible, wear heat insulating and chemical proof gloves and clothes and face sheild and goggles for eyes
Other personal Protection	Slabs of film on the floor can be slippery. Exercise due care in areas where slippage can occur.



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## 9.) Physical and Chemical Properties

\* These are indicative values only and should not be regarded as product specification.

### General Information

Appearance	Flexible Plastic Film
Physical state at 20 °C	Solid
Colour:	Glossy, Silver Plastic film.
Odour:	Odourless

### Important health ,safety and Enviornmental information

#### Temperature Characteristics:

Melting point 255-265 °C. (copolyester layer or coatings can melt at lower temperatures.)

#### Flammability Characteristics:

Auto ignition temperature 480° C- ASTM 10929-68

Flash Point 440°C ASTM 09129-68

Combustion The film burns along with flame. In case of non contact of flame ,it will shrink and estinqush of its own. The molten material may drip and ignite fire.Combustion will evolve irritant vapours.At complete combustion the major products formed are Carbon di oxide, carbon mono oxide and water.

Explosion Limit Not applicable

Oxidising Properties: Not applicable

#### Solubility:

In water at 20°C: Practically insoluble.

In organic solvents at 20°C Insoluble in common organic solvents.

Density 1.3 - 1.4 gm/cm<sup>3</sup>

## 10.) Stability and Reactivity

Stability:	Stable under normal conditions of use upto 45°C.
Hazardous reactions:	No hazardous reactions known under normal atmospheric conditions.
Condition to avoid	Do not heat to temerature exceeding 235 deg. C

## 11.) Toxicological Information

Acute toxicity	The product is harmless and biologically inert.
Specific effects	At the best of current knowledge, the material is not genotoxic, carcinogenetics or harmful for reproduction.

## 12.) Ecological information

Bio degradation	Mateirial is not bio-degradable
Information on Ecological effects	Avoid dissamination in the Enviornment

## 13.) Disposal Information

Spill, leak or release	Pick up film to avoid a slipping hazard.
Waste disposal	Dispose in accordance with local regulations, Landfill is preferred. Forced draft incineration is an alternate or recycling This product should not be dumped, spilled raised or washed into sewers or public waterways.



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## 14.) Transport Information

	The data provide in this section is for information only please apply the appropriate regulations to properly classify your shipment for transportation.
Land: Rail/Road:	Not restricted
Sea:	Not restricted
Air:	Not restricted
Dispatch by mail:	Permitted

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## 15.) Regulatory Information

Labeling in accordance with EEC/FDA

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## 16.) Other Information

The information as mentioned above relates only to the specific material designated here in and does not relate to use in combination with any other material in our process.

AUTHORISED SIGNATORY

FOR UFLEX LIMITED