

## **Polyethylene – LDPE natural and flesh coloured**

### **1. PREPARATION IDENTIFICATION AND PRODUCER**

#### **1.1 TECHNICAL NAME**

Orthopaedic sheets made out of a low density polyethylene compound

#### **1.2 PRODUCER**

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#### **1.3 CHEMICAL NAME**

Polyethylene

### **2. COMPOSITION/INFORMATION ON INGREDIENTS**

The product is a polyethylene copolymer.

Contains no substance classified as hazardous, in concentrations which should be taken into account according to EC directives.

Common chemical name:	Low density polyethylene
Formula:	$(-\text{CH}_2-\text{CH}_2-)_n$
Generic name:	Polyolefines
Synonym(s):	LDPE
Components contributing to the hazard:	None

### **3. HAZARDS IDENTIFICATION**

The product is not classified as a dangerous preparation (EC).

Inhalation of dust may irritate the respiratory tract. Prolonged inhalation of high doses of decomposition products may give headache or irritation of the respiratory tract.

Skin contact: Material is unlikely to cause irritation, but if contact with molten material occurs, treat as for thermal burn (see also section 3).

Eye contact: Fines can cause mechanical irritation; Red eyes

#### **4. FIRST AID MEASURES**

Inhalation:

When fumes of molten material have been inhaled:

- move person to fresh air as quickly as possible
- rest in half upright position
- loosen clothing
- keep warm

In case of respiratory problems move person to first aid station for medical treatment.

Skin contact: Any molten material on the skin/burns should be cooled (off) as quickly as possible by means of cold water. Cover the wound with sterile cloth and move person to first aid station or hospital for medical treatment.

Attention: never pull off the molten material from the wound.

Eye contact: Any material entering the eye should be flushed out with copious volumes of water.

#### **5. FIRE FIGHTING MEASURES**

Extinguishing agents:

Water in spread jet, dry chemicals, foam or carbon dioxide should be used.

The product burns, but is not classified as flammable.

Principal toxicant in the smoke is carbon monoxide.

#### **6. MEASURES IN THE CASE OF ACCIDENTAL SPILLAGE**

##### ***PERSONAL PRECAUTIONS***

Prevent the melt material from contacting the skin, eyes and clothing.

##### ***ENVIRONMENTAL PRECAUTIONS***

Clean the areas of passage to prevent falls from sliding

#### **7. HANDLING AND STORAGE**

##### ***7.1 HANDLING***

Handling the material at ambient temperature does not lead to any risks. When transformed avoid inhaling the fumes and vapours by airing the work place and if necessary by adopting aspiration hoods.

## **7.2 STORAGE**

The product in sacks and big-bags must be placed away from sunlight in well-aired and not excessively hot places.  
Equipment for storing the melt product supplied by a bulk lorry must be grounded to discharge the accumulation of static electricity.

## **7.3 NOTES**

The product is stable and chemically inert.

## **8. EXPOSURE CONTROL / PERSONAL PROTECTION**

### ***TECHNICAL PROTECTION MEASURES***

No special safety measures are required.

### ***EXPOSURE CONTROL LIMITS***

None

### ***RESPIRATION PROTECTION***

Wear a mask with a suitable filter when exposed to combustion fumes.

### ***PROTECTION FOR THE HANDS***

Wear suitable gloves in case of contact with melted material.

### ***PROTECTION FOR THE EYES***

None

### ***PROTECTION FOR THE SKIN***

Wear a boiler suit and high enclosed footwear in case of contact with melted material.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

Melting point: 90-135 °C  
Density: 0.90 – 0.96 g/cm<sup>3</sup>  
Ignition temperature: > 320°C  
Solubility: insoluble in water

### Combustible product

Heat of combustion : ca. 44 MJ/Kg  
Auto ignition temperature : ca. 340° C

### 9.1 STABILITY AND REACTIVITY

The product is a stable thermoplastic, with no chemical reactivity.

### 9.2 TOXICOLOGICAL INFORMATION

The product is not dangerous.

Acute toxicity: None  
Local effects: None  
Chronic toxicity: None  
Sanitation: None  
Specific effects: None  
(carcinogenicity, mutagenicity,  
teratogenicity, narcosis)

### 9.3 ECOLOGICAL INFORMATION

The product is not considered dangerous for the environment.

Mobility: None  
Persistence/degradability: Not UV resistant  
Bioaccumulation: None  
Ecotoxicity: There is no indication that this material is a risk to  
the environment.  
Aquatic toxicity: Insoluble non toxic solid material (no water  
hazard).

### 9.4 DISPOSAL CONSIDERATIONS

Reuse or recycle if not contaminated. The product may be safely used as fuel or land filled. Proper combustion does not require any special flue gas control. No leachate is generated in landfills. Check with local regulations.

## 10. STABILITY AND REACTIVITY

The product is stable and chemically inert at ambient temperature.

## 11. TOXICOLOGICAL INFORMATION

There are no fixed limits for exposure to the monomers that compose the polymer. Contact with fumes that may be developed during the transformation process should anyway be avoided by capturing the same and/or ventilating the work places.

## 12. ECOLOGICAL INFORMATION

The product is not biodegradable. It can be recycled using suitable technologies. It does not contain hexavalent based chemicals of lead, mercury, cadmium or chromium. There are no risks for water tables.

## 13. CONSIDERATIONS ON DISPOSAL

According to the measures of Presidential Decree n° 915, the product can be assimilated with urban refuse. It can therefore be disposed of in an incinerator or sent to a disposal site.

## 14. TRANSPORT INFORMATION

Not relevant

## 15. REGULATORY INFORMATION

Based on directives: EEC 88/379: Concerning the classification, packaging and labelling of dangerous preparations.

EEC 91/155: Concerning the specific information system methodologies for dangerous preparations.

Based on Ministerial Decree: n° 46 of 28/01/1992: Concerning the classification, packaging and labelling of dangerous preparations implementing the directives issued by the European Community panel and commission.

The product is not considered as dangerous goods.

These indications and the Legislative Decree n° 626 of 19/09/94 were considered in the compilation of this card.

## 16. OTHER INFORMATION

The information shown is based on our current knowledge and intends to supply indications on the safety standards. It must not therefore be considered as a guarantee of the specific product properties.

Notice: This safety data sheet provides general information, applicable for PE types. Project related physical, mechanical and chemical properties can vary for different PE types and must be verified separately for each application.

All information given herein is based on our best knowledge, which is supported by extensive research, development and application-experience, but AGRU undertakes no liability whatsoever in connection with the actual application and processing of the products nor of the above given information.

Sources: *Borealis, MBP, Polymer Plastic*