

# Material Safety Data Sheet

PCR HDPE Regranulate

Product Code: 000613

Material use: Raw materials for plastics industry

Composition		
Chemical Nature	Components contributing to the hazard	CAS number
Polyethylene (100%PCR)	Not relevant	9002-88-4

Hazards identification	
Most important hazards	Hazard warning not required
Specific hazards	Vapour and fumes released at elevated processing temperatures may be irritant for the eyes, the nose, the throat and the respiratory tract and in case of overexposure may cause nausea and headache. The material is not classified as being a dangerous preparation according to the EEC-Directive 88/379 and the subsequent amendments.

First-Aid measures	
Inhalation	When fumes of molten material have been inhaled; (1) Move person to fresh air as quickly as possible; (2) rest in half upright position; (3) loosen clothing; (3) 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.

# Material Safety Data Sheet

Ingestion	No danger of toxicity, this material is biologically inactive.
-----------	--

## Fire-fighting measures

Extinguishing media	Water, water/foam, CO2, ABC fire extinguisher powder.
Specific Hazards	Treat the material as a solid that can burn. Moulded parts or solid granules generally burn slowly with flaming drips. In case of fire appreciable quantities of carbon monoxide and ammonia are released in combination with irritating and/or toxic substances.
Protection for the fire-fighters	Do not approach fire in confined space without positive pressure self-breathing apparatus and full bunker gear: bunker coats, helmet with face shield, gloves, rubber boots.

## Accidental release measures

Personal precautions	(1) Apply ample grounding with respect to dust explosion danger caused by released dust from granulate supply (filters): see section 7. (2) Protection of skin/eye/hand: see section 8.
Environmental precautions	Disposal considerations - see section 13
Cleaning up methods	Shovel or sweep up, use especially industrial vacuum cleaner to suck possible fines/dust. Avoid generating dust clouds. Put into containers for reclaiming or disposal.

## Handling and storage

Technical measures	Make provisions for sufficient ventilation and local exhaust at vent, nozzle and ejected melt.
Precautions	Dust and processing fumes must be removed by effective exhaust ventilation.
Technical measures and storage conditions	The material should be stored in a dry place.
Incompatible products	Stack pallets only two high when storing in order to prevent collapsing.

# Material Safety Data Sheet

Exposure controls/ personal protection	
Control parameters	Threshold Limit Value (TLV): a provisional TLV (TWA 8 hours) is advised in accordance with the TLV of nontoxic nuisance dust: 10 mg/m <sup>3</sup> for total dust; 5 mg/m <sup>3</sup> for respirable dust. Personal protective equipment: (1) Respiratory protection: when TLV is accidentally exceeded see section 7(prevention of dust generation). (2) Hand protection: when handling a hot melt, heat resistant gloves should be worn (e.g. when purging a processing machine). (3) Eye protection: when handling a hot melt, heat resistant face shields should be worn (e.g. when purging a processing machine). (4) Skin and body protection: the use of apron, boots and/or full protective suit is not prescribed here; it is up to the decision of the processor.
Hygiene measures	Adequate washing facilities, with supplies of mild soap and hand cleanser should be available at all working locations. Solvents should never be used as hand cleansers. Smoking, eating and drinking in working and storage area's should be prohibited.

Physical and chemical properties	
Physical state	Solid at 20°C
Odor	Slight odor
Flashpoint	> 355°C
Color	opaque, dependent on added pigment
Form	Granulate
Melt point	132°C
Auto Ignition Temp.	> 360°C
Density	0.94-0.96g/cm <sup>3</sup>
Decomposition	> 300°C
Solubility in water	Insoluble

# Material Safety Data Sheet

Solubility in Other Substance	soluble in xylene, naphthalene at high temp.
<b>Dust Explosive Properties</b>	
Lower Explosion Limit (LEL)	Mandatory to remain <10g/m <sup>3</sup> air (fines < 125µm)
Dust Explosion Class (st)	St 1 (fines)
Minimum Ignition Temp.	440°C

## Stability and reactivity

Stability	The material is chemically unreactive. Under certain conditions however hazardous reactions can take place.
Conditions to be avoided	Temperatures >350° C and/or long residence times should be avoided since thermal degradation occurs.
Materials to be avoided	Strong oxidizing agents.
Hazardous decomposition products	At processing temperatures some degree of thermal degradation will occur. Although highly dependent on temperature and environmental conditions, traces of a variety of toxic and/or irritating gases may be evolved.

## Toxicological information

Acute toxicity	None (LD50 oral rat >5000 mg/kg)
Local effects	The material appears to be a non-toxic substance in standard toxicological ecotoxicological tests and is regarded as biologically inactive.

## Ecological information

Persistence/degradability	very low UV degradability
Ecotoxicity	no indication that this material is being a risk to the environment.
Aquatic toxicity	insoluble non-toxic solid material (no water hazard)

# Material Safety Data Sheet

## Disposal Considerations

Considerations

This material - as well as the packaging thereof - presents no danger regarding toxicological and/or ecological considerations. It can be burnt in a controlled way or be disposed of via Landfill, or it can be recycled for - possibly less critical - nonfood applications. Note: Additional national or regional provisions may be in force within this matter.

## Transport information

General precautions

Keep this material dry during transport.

Special precautions

No special precautions have to be met. This material is not classified according to the recommendations of the UN (8.edition) on the transport of dangerous goods.

## Regulatory information

Labelling and Classification

Labelling according to EEC directive 88/379/EEC and subsequent amendments is not required. Additional national legislation may be in force in this matter. EEC classification: No dangerous preparation. R(isk) phrases: N.a.

## Other information

None of the materials and/or products referenced herein should be used and/or applied in any product, device or material used or for use as human body implant or otherwise within the human body