SECTION1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Chemical type : Substance

Trade name : r - HDPE Tech Grade

CAS no : 9002-88-4

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

Industrial/Professional use spec. : Manufacture of plastics products, including compounding and conversion

Use of the substance/preparation : Use in open, semi-open or closed processes

1.2.2. Uses advised against

No relevant data available

1.3. Details of the supplier of the safety data sheet

1.4. Emergency telephone number

No relevant data available

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

2.1.1. Classification according to Regulation (EC) No 1272/2008 [CLP/GHS]

Not classified

2.1.2. Classification according to Directive 67/548/EEC or 1999/45/EC

Not classified

2.1.3. Adverse physicochemical, human health and environmental effects

No relevant data available

2.2. Label elements

2.2.1. Labelling according to Regulation (EC) No 1272/2008 [CLP/GHS]

No labelling applicable

2.2.2. Labelling according to Directive 67/548/EEC or 1999/45/EC

R-phrases : -

2.3. Other hazards

No relevant data available

SECTION 3: Composition/information on ingredients

3.1. Substances

Name	Product identifier	%	Classification according to Directive 67/548/EEC
HDPE	(CAS no)9002-88-4	100	Not classified

Name	Product identifier	%	Classification according to Regulation (EC) No 1272/2008 [CLP/GHS]
HDPE	(CAS no)9002-88-4	100	Not classified

For the full text of R- and H-phrases in this section, see section 16.

3.2. Mixtures

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	:	Cool skin rapidly with cold water after contact with hot product.
First-aid measures after inhalation	:	Not applicable.
First-aid measures after skin contact	:	Cool skin rapidly with cold water after contact with hot product.
First-aid measures after eye contact	:	Then wash with plenty of water.
First-aid measures after ingestion	:	Not applicable.

4.2. Most important symptoms and effects, both acute and delayed

Symptoms/injuries	:	Stable at normal conditions.
Symptoms/injuries after inhalation	:	Dust from this product may cause irritation to the respiratory tract.
Symptoms/injuries after skin contact	:	Risk of thermal burns on contact with molten product.
Symptoms/injuries after eye contact	:	Can occur: eye irritation.
Symptoms/injuries after ingestion	:	Not applicable.
Symptoms/injuries upon intravenous administration	:	Not applicable.

4.3. Indication of any immediate medical attention and special treatment needed

No specific first aid measures are required.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	:	carbon dioxide (CO_2), powder, alcohol-resistant foam, hazy water.

5.2. Special hazards arising from the substance or mixture

Fire hazard	:	Not classified as flammable by EC criteria.
Explosion hazard	:	Dust may form flammable and explosive mixture with air.
Reactivity	:	Not applicable.
General measures	:	Avoid dust formation.

5.3. Advice for firefighters

Firefighting instructions	:	Evacuate the personnel away from the fumes.
Protective equipment for firefighters	:	Appropriate self-contained breathing apparatus may be required.
Other information (firefighting)	:	Do not allow into drains or water courses or dispose of where ground or surface waters may be affected.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Protective equipment	:	Respiratory protection.
Emergency procedures	:	Avoid inhalation of vapours.

6.1.2. For emergency responders

Protective equipment	:	Ventilation, local exhaust, or breathing protection.

6.2. Environmental precautions

Avoid dust formation. Do not allow into drains or water courses or dispose of where ground or surface waters may be affected.

6.3. Methods and material for containment and cleaning up

For containment	:	Sweep or shovel spills into appropriate container for disposal.
Other information (accidental release)	:	Collect spilled polymer: It could cause falls (Danger of slipping).

6.4. Reference to other sections

No relevant data available

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling	:	Avoid dust formation.
Handling temperature	:	room temperature °C

7.2. Conditions for safe storage, including any incompatibilities

Technical measures	:	Minimize generation of dust.
Storage conditions	:	Store in dry, cool, well-ventilated area.
Prohibitions on mixed storage	:	Not applicable.
Storage area	:	No special storage required.
Containers : requirements	:	Keep container closed when not in use.
Containers : material selection	:	Not applicable.

7.3. Specific end use(s)

No relevant data available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

HDPE (9002-88-4)		
Germany	TRGS 900 Occupational exposure limit value (mg/m³)	10 mg/m³ inhalable dust limit value (3 mg/m3 respirable)
Germany	Remark (TRGS 900)	dust limit value
Italy - Portugal - USA ACGIH	ACGIH TWA (mg/m³)	10 mg/m³ inhalable dust limit value (respirable 4 mg/m3)
Spain	VLA-ED (mg/m³)	10 mg/m³ Dust limit values
Switzerland	VME (mg/m³)	5 mg/m³ Dust limit values
United Kingdom	WEL TWA (mg/m³)	10 mg/m³ inhalable dust limit value

8.2. Exposure controls

Appropriate engineering controls	:	Either local exhaust or general room ventilation is usually required.
Materials for protective clothing	:	Not applicable.
Hand protection	:	Gloves.
Eye protection	:	Safety glasses.
Skin and body protection	:	Not applicable.
Respiratory protection	:	In case of dust formation use respirator with filter:.
Environmental exposure controls	:	Do not allow into drains or water courses or dispose of where ground or surface waters may be affected.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	:	Solid
Appearance	:	Natural colour plastic pellets.
Colour	:	depends on the pigment.
Odour	:	Odourless.
Odour threshold	:	No data available
pH	:	No data available
Melting point	:	105-130 °C
Solidification point	:	No data available
Boiling point	:	No data available
Flashpoint	:	> 350 °C
Relat. evapor. rate comp. to butylacetate	:	No data available
Flammability (solid, gas)	:	No data available
Explosive limits	:	No data available
Vapour pressure	:	No data available
Relative vapour density	:	No data available
Relative density	:	No data available
Absolute density	:	< 1 g/cm³
Solubility	:	Water: Insoluble.
Log Pow	:	No data available
Auto-ignition temperature	:	> 380 °C
Decomposition temperature	:	Product is stable under normal conditions. °C
Viscosity	:	No data available

9.2. Other information

No relevant data available

SECTION 10: Stability and reactivity

10.1. Reactivity

Not applicable.

10.2. Chemical stability

product is stable.

10.3. Possibility of hazardous reactions

No relevant data available

10.4. Conditions to avoid

Overheating.

10.5. Incompatible materials

Not applicable.

10.6. Hazardous decomposition products

On burning: release of carbon monoxide - carbon dioxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

HDPE (9002-88-4)	
LD50 oral rat	Not known. mg/kg
LD50 dermal rat	Not known. mg/kg
LD50 dermal rabbit	Not known. mg/kg
LC50 inhalation rat (mg/l/4h)	Not known. mg/l/4h
LC50 inhalation rat (ppm/4h)	Not known. ppm/4h

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Not dangerous.

Ecology - air : Not dangerous.

Ecology - water : Product is practically insoluble in water, in view of its consistency and insolubility in water, no ecological problems are to be expected if the product is properly handled. The product is not readily biodegradable.

12.2. Persistence and degradability

HDPE (9002-88-4)	
Persistence and degradability	Material is inert and not expected to be biodegradable or toxic.
BSB	Not applicable g O^2/g substance
COD	Not applicable g O^2/g substance
ThOD	Not applicable g O^2/g substance
BOD (% ThOD)	Not applicable % ThOD

12.3. Bioaccumulative potential

HDPE (9002-88-4)	
Log Kow	Not applicable.
Bioaccumulative Potential	not bioaccumulative.

12.4. Mobility in soil

HDPE (9002-88-4)	
Mobility in soil	None.
Surface tension	Not applicable.
Ecology - soil	Not dangerous.

12.5. Results of PBT and vPvB assessment

HDPE (9002-88-4)	
PBT assessment	no PBT substance

12.6. Other adverse effects

Environmental and other adverse effects : The product does not have any known adverse effects on the environment.

Other information (adverse effects) : No adverse health effects were noted.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Regional legislation (waste)	:	Comply with applicable regulations for solid waste disposal.
Waste treatment methods	:	If recycling is not possible, eliminate in accordance with local valid waste disposal regulations.
Ecology - waste materials	:	If recycling is not possible, eliminate in accordance with local valid waste disposal regulations. Refer to manufacturer/supplier for information on recovery/ recycling.

SECTION 14: Transport information

No transport regulation applicable

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

No relevant data available

15.1.2. National regulations

LGK Storage class	:	Not applicable.
VbF class	:	Not applicable.
Other regulations, restrictions and prohibition regulations	:	Generally all national regulations regarding this product type apply.

15.2. Chemical safety assessment

no CSR necessary

SECTION 16: Other information

Data sources	:	(Published data).

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.