

Safety data sheet

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BASF Safety data sheet according to the United Nations' Globally Harmonized System (UN GHS)

Date / Revised: 13.10.2025

Version: 5.0

Product: **ULTRADUR® S 4090 G4 UNCOLORED POLYBUTYLENE TEREPHTHALATE**

(ID no. 30035786/SDS_GEN_00/EN)

Date of print 13.10.2025

1. Identification

Product identifier

**ULTRADUR® S 4090 G4 UNCOLORED
POLYBUTYLENE TEREPHTHALATE**

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

Relevant identified uses: Polymer

Recommended use: Polymer, for industrial processing only

Details of the supplier of the safety data sheet

Company:

BASF SE

67056 Ludwigshafen

GERMANY

Telephone: +49 621 60-0

E-mail address: global.info@basf.com

Emergency telephone number

International emergency number:

Telephone: +49 180 2273-112

2. Hazards Identification

Classification of the substance or mixture

According to UN GHS criteria

No need for classification according to GHS criteria for this product.

Label elements

Globally Harmonized System (GHS)

The product does not require a hazard warning label in accordance with GHS criteria.

Other hazards

According to UN GHS criteria

No specific dangers known, if the regulations/notes for storage and handling are considered.

3. Composition/Information on Ingredients

Substances

Not applicable

Mixtures

Chemical nature

Preparation based on: polybutylene terephthalate (PBT), styrene-acrylonitrile-copolymer, Butyl acrylate-styrene-acrylonitrile copolymer, Polyethyleneterephthalate (PET)

additives, fillers

4. First-Aid Measures

Description of first aid measures

Avoid contact with the skin, eyes and clothing.

If inhaled:

If difficulties occur after dust has been inhaled, remove to fresh air and seek medical attention.

On skin contact:

Burns caused by molten material require hospital treatment.

On contact with eyes:

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In case of contact with the eyes, rinse immediately for at least 15 minutes with plenty of water. If irritation develops, seek medical attention.

On ingestion:

Rinse mouth and then drink 200-300 ml of water. If difficulties occur: Seek medical attention.

Most important symptoms and effects, both acute and delayed

Symptoms: (Further) symptoms and / or effects are not known so far

Hazards: No hazard is expected under intended use and appropriate handling.

Indication of any immediate medical attention and special treatment needed

Treatment: Treat according to symptoms (decontamination, vital functions), no known specific antidote.

5. Fire-Fighting Measures

Extinguishing media

Suitable extinguishing media:
water spray, dry powder, foam

Unsuitable extinguishing media for safety reasons:
water jet

Special hazards arising from the substance or mixture

At temperatures of > 300 °C can be emitted: Carbon monoxide, Tetrahydrofuran, Acrylonitrile, Styrene, 2-Phenylpropene, Butyl acrylate

Under special fire conditions traces of other toxic substances are possible. Formation of further decomposition and oxidation products depends upon the fire conditions.

Advice for fire-fighters

Special protective equipment:
Wear a self-contained breathing apparatus.

Further information:
Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

6. Accidental Release Measures

High risk of slipping due to leakage/spillage of product.

Personal precautions, protective equipment and emergency procedures

No special precautions necessary.

Environmental precautions

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Prevent releases of this product into the environment. Comprehensive instructions explaining how to prevent releases of plastics pellets, flakes, and powders to the environment during both use and disposal are provided by the industry program 'Operation Clean Sweep' (OCS).

Methods and material for containment and cleaning up

For small amounts: Pick up with suitable appliance and dispose of.

For large amounts: Pick up with suitable appliance and dispose of.

For residues: Sweep/shovel up.

Dispose of absorbed material in accordance with regulations.

7. Handling and Storage**Precautions for safe handling**

Avoid inhalation of dusts/mists/vapours. Provide good ventilation of working area (local exhaust ventilation if necessary).

Protection against fire and explosion:

Take precautionary measures against static discharges.

Conditions for safe storage, including any incompatibilities

Segregate from foods and animal feeds.

Suitable materials for containers: Low density polyethylene (LDPE), High density polyethylene (HDPE), Aluminium, Carbon steel (Iron)

Further information on storage conditions: Keep container tightly closed and dry; store in a cool place. Avoid dust formation, product dust can form an explosive mixture with air.

Storage stability:

Protect against moisture.

Specific end use(s)

For the relevant identified use(s) listed in Section 1 the advice mentioned in this section 7 is to be observed.

8. Exposure Controls/Personal Protection**Control parameters**Components with occupational exposure limits

The limit values will not be achieved if the product is processed proper and suitable ventilation is provided.

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100-42-5: Styrene
 98-83-9: 2-Phenylpropene
 141-32-2: Butyl acrylate
 109-99-9: Tetrahydrofuran
 107-13-1: Acrylonitrile

Exposure controls

Personal protective equipment

Respiratory protection:

Breathing protection if breathable aerosols/dust are formed. Wear respiratory protection if ventilation is inadequate. (Particle filter EN 143 P2 or FFP2)

Hand protection:

Use additional heat protection gloves when handling hot molten masses (EN 407), e.g. of textile or leather.

Eye protection:

Safety glasses with side-shields (frame goggles) (e.g. EN 166)

Body protection:

Body protection must be chosen depending on activity and possible exposure, e.g. apron, protecting boots, chemical-protection suit (according to EN 14605 in case of splashes or EN ISO 13982 in case of dust).

General safety and hygiene measures

Avoid inhalation of vapour. When using, do not eat, drink or smoke. Hands and/or face should be washed before breaks and at the end of the shift. After use of gloves apply skin-cleaning agents and skin cosmetics.

9. Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

State of matter:	solid	
Form:	granules	
Colour:	various, depending on the colourant	
Odour:	odourless	
Odour threshold:	not applicable	
melting range:	220 - 225 °C (1.013 hPa)	(DIN EN ISO 3146)
Boiling range:	The substance / product decomposes therefore not determined.	
Sublimation point:	No applicable information available.	
Flammability:	not self-igniting	(derived from flash point)
Flammability of Aerosol Products:	not applicable, the product does not form flammable aerosoles	
Lower explosion limit:	For solids not relevant for classification and labelling.	

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Upper explosion limit:	For solids not relevant for classification and labelling.	
Flash point:	not applicable	
Auto-ignition temperature:	> 400 °C	(ASTM D1929)
Thermal decomposition:	> 300 °C (TGA)	
	To avoid thermal decomposition, do not overheat.	
pH value:	not applicable	
Viscosity, kinematic:	not applicable, the product is a solid	
Viscosity, dynamic:	not applicable, the product is a solid	
Solubility in water:	insoluble	(OECD Guideline 105)
	(20 °C, 1.013 hPa)	
Partitioning coefficient n-octanol/water (log Kow):	not applicable	
Vapour pressure:	not applicable	
Relative density:	Study does not need to be conducted.	
Density:	1,30 - 1,50 g/cm ³	(EN ISO 1183-1)
	(20 °C, 1.013 hPa)	
Relative vapour density (air):	not applicable	
Particle characteristics		
Particle size distribution:	spheroidal -	
Specific Surface Area:	0,0 m ² /g	(MSSA, ISO 9227)

9.2. Other information

Information with regard to physical hazard classes

Explosives

Explosion hazard: not explosive

Oxidizing properties

Fire promoting properties: not fire-propagating

Pyrophoric properties

Self-ignition temperature: Test type: Spontaneous self-ignition at room-temperature.

not self-igniting

Self-heating substances and mixtures

Self heating ability: It is not a substance capable of spontaneous heating according to UN transport regulations class 4.2. (VDI 2263, sheet 1, 1.4.1 (May 1990))

Corrosion to metals

No corrosive effect on metal.

Other safety characteristics

Bulk density: 600 - 900 kg/m³ (DIN 53466)
(20 °C, 1.013 hPa)

Evaporation rate: The product is a non-volatile solid.

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10. Stability and Reactivity

Reactivity

No hazardous reactions if stored and handled as prescribed/indicated.

Corrosion to metals: No corrosive effect on metal.

Chemical stability

The product is stable if stored and handled as prescribed/indicated.

The product is chemically stable.

Possibility of hazardous reactions

No hazardous reactions known.

The product is chemically stable.

Conditions to avoid

Temperature: > 300 °C

See SDS section 7 - Handling and storage.

Incompatible materials

Substances to avoid:

No substances known that should be avoided.

Hazardous decomposition products

Possible decomposition products:

Carbon monoxide, Tetrahydrofuran, Acrylonitrile, Styrene, 2-Phenylpropene, Water, Butyl acrylate, Carbon dioxide

Gaseous products of degradation can be given off if the product is greatly overheated.

11. Toxicological Information

Information on toxicological effects

Acute toxicity

Assessment of acute toxicity:

Contact with molten product may cause thermal burns.

Irritation

Assessment of irritating effects:

Based on our experience and the information available, no adverse health effects are expected if handled as recommended with suitable precautions for designated uses.

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Serious eye damage/irritation: May cause mechanical irritation.

Respiratory/Skin sensitization

Assessment of sensitization:

Based on our experience and the information available, no adverse health effects are expected if handled as recommended with suitable precautions for designated uses.

Germ cell mutagenicity

Assessment of mutagenicity:

Based on our experience and the information available, no adverse health effects are expected if handled as recommended with suitable precautions for designated uses.

Carcinogenicity

Assessment of carcinogenicity:

Based on our experience and the information available, no adverse health effects are expected if handled as recommended with suitable precautions for designated uses.

Information on: Talc ($Mg_3H_2(SiO_3)_4$)

Assessment of carcinogenicity:

Based on available data, the classification criteria are not met.

Reproductive toxicity

Assessment of reproduction toxicity:

Based on our experience and the information available, no adverse health effects are expected if handled as recommended with suitable precautions for designated uses.

Developmental toxicity

Assessment of teratogenicity:

Based on our experience and the information available, no adverse health effects are expected if handled as recommended with suitable precautions for designated uses.

Specific target organ toxicity (single exposure)

Assessment of STOT single:

not applicable

Repeated dose toxicity and Specific target organ toxicity (repeated exposure)

Assessment of repeated dose toxicity:

Based on our experience and the information available, no adverse health effects are expected if handled as recommended with suitable precautions for designated uses.

Aspiration hazard

No aspiration hazard expected.

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Other relevant toxicity information

Based on our experience and the information available, no adverse health effects are expected if handled as recommended with suitable precautions for designated uses.

12. Ecological Information

Toxicity

Assessment of aquatic toxicity:

The product has not been tested. The statement has been derived from the structure of the product. There is a high probability that the product is not acutely harmful to aquatic organisms.

Persistence and degradability

Assessment biodegradation and elimination (H₂O):

Experience shows this product to be inert and non-degradable.

The product is virtually insoluble in water and can thus be separated from water mechanically in suitable effluent treatment plants.

Elimination information:

Poorly biodegradable.

Assessment of stability in water:

According to structural properties, hydrolysis is not expected/probable.

Bioaccumulative potential

Assessment bioaccumulation potential:

Does not significantly accumulate in organisms.

Bioaccumulation potential:

The product will not be readily bioavailable due to its consistency and insolubility in water.

Mobility in soil

Assessment transport between environmental compartments:

Adsorption in soil: Adsorption to solid soil phase is not expected.

Results of PBT and vPvB assessment

According to Annex XIII of Regulation (EC) No.1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH): The product does not fulfill the criteria for PBT (Persistent/bioaccumulative/toxic) and vPvB (very persistent/very bioaccumulative).

Other adverse effects

The product does not contain substances that are listed in Regulation (EU) 2024/590 on substances that deplete the ozone layer.

Additional information

Adsorbable organically-bound halogen (AOX):
This product contains no organically-bound halogen.

Other ecotoxicological advice:
The product is a polymeric compound.

13. Disposal Considerations

Waste treatment methods

Check for possible recycling.
Incinerate in suitable incineration plant, observing local authority regulations.

Contaminated packaging:
Packs must be completely emptied.
Completely emptied packagings can be given for recycling.

14. Transport Information

Land transport

ADR

	Not classified as a dangerous good under transport regulations
UN number or ID number:	Not applicable
UN proper shipping name:	Not applicable
Transport hazard class(es):	Not applicable
Packing group:	Not applicable
Environmental hazards:	Not applicable
Special precautions for user	None known

RID

	Not classified as a dangerous good under transport regulations
UN number or ID number:	Not applicable
UN proper shipping name:	Not applicable
Transport hazard class(es):	Not applicable
Packing group:	Not applicable
Environmental hazards:	Not applicable
Special precautions for user	None known

Inland waterway transport

ADN

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UN number or ID number: Not applicable
UN proper shipping name: Not applicable
Transport hazard class(es): Not applicable
Packing group: Not applicable
Environmental hazards: Not applicable
Special precautions for user: None known

Transport in inland waterway vessel

Not evaluated

Sea transport

IMDG

Not classified as a dangerous good under transport regulations

UN number or ID number: Not applicable
UN proper shipping name: Not applicable
Transport hazard class(es): Not applicable
Packing group: Not applicable
Environmental hazards: Not applicable
Special precautions for user: None known

Air transport

IATA/ICAO

Not classified as a dangerous good under transport regulations

UN number or ID number: Not applicable
UN proper shipping name: Not applicable
Transport hazard class(es): Not applicable
Packing group: Not applicable
Environmental hazards: Not applicable
Special precautions for user: None known

Maritime transport in bulk according to IMO instruments

Maritime transport in bulk is not intended.

15. Regulatory Information**Safety, health and environmental regulations/legislation specific for the substance or mixture**Not applicable

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16. Other Information

The data contained in this safety data sheet are based on our current knowledge and experience and describe the product only with regard to safety requirements. This safety data sheet is neither a Certificate of Analysis (CoA) nor technical data sheet and shall not be mistaken for a specification agreement. Identified uses in this safety data sheet do neither represent an agreement on the corresponding contractual quality of the substance/mixture nor a contractually designated use. It is the responsibility of the recipient of the product to ensure any proprietary rights and existing laws and legislation are observed.

Vertical lines in the left hand margin indicate an amendment from the previous version.