

Safety Data Sheet

ULTRADUR® S 4090 G4 BLACK 5110 POLYBUTYLENE TEREPHTHALATE

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Version: 6.0

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1. Identification

Product identifier used on the label

ULTRADUR® S 4090 G4 BLACK 5110 POLYBUTYLENE TEREPHTHALATE

Recommended use of the chemical and restriction on use

Recommended use*: Polymer; for industrial processing only
Suitable for use in industrial sector: Polymers industry

* The "Recommended use" identified for this product is provided solely to comply with a Federal requirement and is not part of the seller's published specification. The terms of this Safety Data Sheet (SDS) do not create or infer any warranty, express or implied, including by incorporation into or reference in the seller's sales agreement.

Details of the supplier of the safety data sheet

Company:

BASF CORPORATION
100 Park Avenue
Florham Park, NJ 07932, USA

Telephone: +1 973 245-6000

Emergency telephone number

CHEMTREC: 1-800-424-9300
BASF HOTLINE: 1-800-832-HELP (4357)

Other means of identification

Molecular formula: (C12 H12 O4)N
Chemical family: polyester resin
Synonyms: Poly(butylene terephthalate)

2. Hazards Identification

According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

Classification of the product

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

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Label elements

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

Hazards not otherwise classified

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

3. Composition / Information on Ingredients

According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

<u>CAS Number</u>	<u>Weight %</u>	<u>Chemical name</u>
109-99-9	>= 0.1 - < 1.0%	tetrahydrofuran
25038-59-9	>= 10.0 - < 15.0%	Polyethyleneterephthalate (PET)
1333-86-4	>= 0.3 - < 1.0%	carbon black
14807-96-6	>= 0.0 - < 1.0%	talc

4. First-Aid Measures

Description of first aid measures

General advice:

Avoid contact with the skin, eyes and clothing. Remove contaminated clothing.

If inhaled:

Remove the affected individual into fresh air and keep the person calm. Assist in breathing if necessary. Immediate medical attention required.

If on skin:

Wash affected areas thoroughly with soap and water. If irritation develops, seek medical attention.

If in eyes:

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

If swallowed:

Ingestion is not likely in the available physical form. If ingested, seek medical attention.

Most important symptoms and effects, both acute and delayed

Symptoms: No significant reaction of the human body to the product known.

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

Indication of any immediate medical attention and special treatment needed

Note to physician

Treatment: Treat symptomatically.

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5. Fire-Fighting Measures

Extinguishing media

Suitable extinguishing media:
water spray, dry powder, carbon dioxide, foam

Special hazards arising from the substance or mixture

Hazards during fire-fighting:
carbon monoxide, tetrahydrofuran, can be emitted at > 290 °C
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

Protective equipment for fire-fighting:
Firefighters should be equipped with self-contained breathing apparatus and turn-out gear.

Further information:

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

6. Accidental release measures

Further 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

This product is not regulated by RCRA. This product is not regulated by CERCLA ('Superfund').

Methods and material for containment and cleaning up

Reclaim for processing if possible. Sweep/shovel up. Place into suitable containers for reuse or disposal in a licensed facility.

7. Handling and Storage

Precautions for safe handling

Avoid inhalation of dusts/mists/vapours.

Protection against fire and explosion:

The product is capable of dust explosion. No explosion proofing necessary.

Conditions for safe storage, including any incompatibilities

The product in undamaged packing need not be stored separately.

Suitable materials for containers: Low density polyethylene (LDPE)

Further information on storage conditions: Keep container tightly closed.

Storage stability:

Protect against moisture.

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8. Exposure Controls/Personal Protection

Components with occupational exposure limits

tetrahydrofuran	OSHA PEL	PEL 200 ppm 590 mg/m ³ ; STEL value 250 ppm 735 mg/m ³ ; TWA value 200 ppm 590 mg/m ³ ;
	ACGIH TLV	STEL value 100 ppm ; Skin Designation ; The substance can be absorbed through the skin. TWA value 50 ppm ;
Glass, oxide, chemicals	ACGIH TLV	TWA value 5 mg/m ³ Inhalable fraction ; TWA value 1 fibers/cm ³ Fiber ; Respirable fibers: length > 5 micrometers; aspect ratio >= 3:1, as determined by the membrane filter method at 400-450X magnification (4-mm objective), using phase-contrast illumination.
carbon black	OSHA PEL	PEL 3.5 mg/m ³ ; TWA value 3.5 mg/m ³ ;
	ACGIH TLV	TWA value 3 mg/m ³ Inhalable fraction ;

Advice on system design:

Provide local exhaust ventilation to control dusts/vapours.

Personal protective equipment

Respiratory protection:

Wear a NIOSH-certified (or equivalent) particulate respirator. Wear respiratory protection if ventilation is inadequate.

Hand protection:

Wear gloves to prevent contact during mechanical processing and/or hot melt conditions.

Eye protection:

Tightly fitting safety goggles (chemical goggles).

Body protection:

Body protection must be chosen based on level of activity and exposure.

General safety and hygiene measures:

Wear protective clothing to prevent contact during mechanical processing and/or hot melt conditions. Avoid inhalation of dust. Wash soiled clothing immediately.

9. Physical and Chemical Properties

Form:	pellets
Odour:	odourless
Odour threshold:	not applicable
Colour:	black
pH value:	not applicable
melting range:	220 - 230 °C

(DIN 53736)

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Boiling range:	The substance / product decomposes therefore not determined.	
Sublimation point:	No applicable information available.	
Flash point:	No data available.	
Flammability:	not self-igniting	
Flammability of Aerosol Products:	not applicable, the product does not form flammable aerosoles	
Autoignition:	> 400 °C	
Vapour pressure:	not applicable	
Density:	1.3 - 1.8 g/cm ³ (20 °C)	(EN ISO 1183-1)
Relative density:	No data available.	
Bulk density:	500 - 800 kg/m ³	
Vapour density:	not applicable	
Partitioning coefficient n-octanol/water (log Pow):	not applicable	
Self-ignition temperature:	not self-igniting	
Thermal decomposition:	298 - 400 °C	
Viscosity, dynamic:	not applicable, the product is a solid	
Viscosity, kinematic:	not applicable, the product is a solid	
Solubility in water:	insoluble	
Solubility (quantitative):	No applicable information available.	
Solubility (qualitative):	No applicable information available.	
Evaporation rate:	The product is a non-volatile solid.	

10. Stability and Reactivity

Reactivity

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

Chemical stability

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

Possibility of hazardous reactions

The product is chemically stable.

No hazardous reactions known.

Conditions to avoid

Temperature: > 290 degrees Celsius

Incompatible materials

Hazardous decomposition products

Decomposition products:
carbon monoxide, carbon dioxide

Thermal decomposition:
298 - 400 °C

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11. Toxicological information

Primary routes of exposure

Routes of entry for solids and liquids are ingestion and inhalation, but may include eye or skin contact. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquefied gases.

Acute Toxicity/Effects

Acute toxicity

Assessment of acute toxicity: Contact with molten product may cause thermal burns. The resin in pelleted form poses a low hazard.

Oral

Type of value: ATE
Value: > 5,000 mg/kg

Inhalation

Not inhalable due to the physico-chemical properties of the product.

Dermal

Type of value: ATE
Value: > 5,000 mg/kg

Assessment other acute effects

No applicable information available.

Irritation / corrosion

Assessment of irritating effects: Thermal decomposition products of the substance can irritate the eyes, skin, and respiratory tract.

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.

Aspiration Hazard

No aspiration hazard expected.

Chronic Toxicity/Effects

Repeated dose toxicity

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.

Genetic toxicity

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.

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Information on: carbon black

Assessment of carcinogenicity: IARC (International Agency for Research on Cancer) has classified this substance as group 2B (The agent is possibly carcinogenic to humans). In long-term animal studies in which the substance was given by inhalation in high concentrations, a carcinogenic effect was observed. A clear indication of an increased risk of cancer in humans has so far not been shown. No carcinogenic potential can be deduced from other studies with rats and mice.

Information on: 1,3-Benzenediamine, 4-(phenylazo)-, monohydrochloride

Assessment of carcinogenicity: IARC Group 3 (not classifiable as to human carcinogenicity).

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.

Other Information

The product has not been tested. The statement has been derived from the properties of the individual components.

Symptoms of Exposure

No significant reaction of the human body to the product known.

12. Ecological Information

Toxicity

Aquatic 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)

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

Bioaccumulative potential

Bioaccumulation potential

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

13. Disposal considerations

Waste disposal of substance:

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

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Container disposal:

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

14. Transport Information

Land transport

USDOT

Not classified as a dangerous good under transport regulations

Sea transport

IMDG

Not classified as a dangerous good under transport regulations

Air transport

IATA/ICAO

Not classified as a dangerous good under transport regulations

15. Regulatory Information

Federal Regulations

Registration status:

Chemical TSCA, US released / listed

EPCRA 311/312 (Hazard categories):

Not hazardous;

State regulations

State RTK

NJ

CAS Number

9003-54-7

65997-17-3

1333-86-4

14807-96-6

65997-17-3

Chemical name

Styrene-acrylonitrile copolymer

Glass, oxide, chemicals

carbon black

talc

Glass, oxide, chemicals

PA

CA Prop. 65:

WARNING: THIS PRODUCT CONTAINS A CHEMICAL(S) KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER.

NFPA Hazard codes:

Health : 1 Fire: 1 Reactivity: 0 Special:

HMIS III rating

Health: 1 Flammability: 1 Physical hazard: 0

16. Other Information

SDS Prepared by:

BASF NA Product Regulations

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