

Safety Data Sheet

ULTRADUR® B 4300 G4 BLACK 05110 POLYBUTYLENE TEREPHTHALATE

Revision date : 2013/05/28

Version: 1.0

Page: 1/7

(30036529/SDS_GEN_US/EN)

1. Product and Company Identification

Company

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

24 Hour Emergency Response Information

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

Molecular formula: (C₁₂H₁₂O₄)_n
Synonyms: Poly(butylene terephthalate)

2. Hazards Identification

Emergency overview

CAUTION:
MAY CAUSE EYE, SKIN AND RESPIRATORY TRACT IRRITATION.
INGESTION MAY CAUSE GASTRIC DISTURBANCES.
Use with local exhaust ventilation.
Wear a NIOSH-certified (or equivalent) particulate respirator.
Wear NIOSH-certified chemical goggles.
Wear protective clothing.
Eye wash fountains and safety showers must be easily accessible.

State of matter: solid
Colour: various, depending on the colourant
Odour: odourless

Potential health effects**Primary routes of exposure:**

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

Acute toxicity:

The resin in pelleted form poses a low hazard.

Irritation / corrosion:

Thermal decomposition products of the substance can irritate the eyes, skin, and respiratory tract.

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.



Safety Data Sheet

ULTRADUR® B 4300 G4 BLACK 05110 POLYBUTYLENE TEREPHTHALATE

Revision date : 2013/05/28
Version: 1.0

Page: 2/7
(30036529/SDS_GEN_US/EN)

Chronic toxicity:

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.

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

Signs and symptoms of overexposure:

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

No hazard is expected under intended use and appropriate handling.

Potential environmental effects

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.

Degradation / environmental fate:

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

3. Composition / Information on Ingredients

<u>CAS Number</u>	<u>Content (W/W)</u>	<u>Chemical name</u>
26062-94-2	>= 20.0 - <= 40.0 %	polybutylene terephthalate (PBT)
30965-26-5	>= 20.0 - <= 40.0 %	polybutylene terephthalate (PBT)
65997-17-3	>= 15.0 - <= 30.0 %	Glass, oxide, chemicals
1333-86-4	>= 0.1 - < 1.0 %	carbon black

4. First-Aid Measures

General advice:

Remove contaminated clothing.

If inhaled:

Remove the affected individual into fresh air and keep the person calm. Assist in breathing if necessary. Consult a physician.

If on skin:

Burns caused by molten material require hospital treatment.

If in eyes:

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

If swallowed:

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

5. Fire-Fighting Measures

Flash point:

Autoignition:

Lower explosion limit:

350 °C

No data available.

(ASTM D1929)

The substance / product decomposes therefore not determined.



Safety Data Sheet

ULTRADUR® B 4300 G4 BLACK 05110 POLYBUTYLENE TEREPHTHALATE

Revision date : 2013/05/28

Version: 1.0

Page: 3/7

(30036529/SDS_GEN_US/EN)

: not applicable, the product does not form flammable aerosols)

Flammability: not self-igniting

Self-ignition temperature: not self-igniting

Suitable extinguishing media:

water spray, foam, dry powder

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.

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

Personal precautions:

No special precautions necessary.

Cleanup:

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

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

Further information:

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

7. Handling and Storage

Handling

Protection against fire and explosion:

Take precautionary measures against static discharges.

Storage

General advice:

Keep container tightly closed. Avoid deposition of dust. Protect against moisture.

Storage stability:

Protect against moisture.

8. Exposure Controls and Personal Protection

Components with occupational exposure limits

carbon black	OSHA	PEL 3.5 mg/m3 ;
	ACGIH	TWA value 3.5 mg/m3 ;

Advice on system design:

Provide local exhaust ventilation to control dusts/vapours.



Safety Data Sheet

ULTRADUR® B 4300 G4 BLACK 05110 POLYBUTYLENE TEREPHTHALATE

Revision date : 2013/05/28
Version: 1.0

Page: 4/7
(30036529/SDS_GEN_US/EN)

Personal protective equipment

Respiratory protection:

Wear a NIOSH-certified (or equivalent) particulate respirator. Wear respiratory protection if ventilation is inadequate. Do not exceed the maximum use concentration for the respirator facepiece/cartridge combination.

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	
Colour:	various, depending on the colourant	
pH value:		not applicable
melting range:	220 - 230 °C	(DIN 53736)
Boiling range:		The substance / product decomposes therefore not determined.
Vapour pressure:		not applicable
Density:	1.3 - 1.8 g/cm3	(20 °C) (EN ISO 1183-1)
Relative density:		No data available.
Bulk density:	600 - 900 kg/m3	
Vapour density:		not applicable
Partitioning coefficient n-octanol/water (log Pow):		not applicable
Viscosity, kinematic:		not applicable, the product is a solid
Solubility in water:		insoluble

10. Stability and Reactivity

Conditions to avoid:

Temperature: > 290 degrees Celsius

Substances to avoid:

No substances known that should be avoided.

Decomposition products:

Hazardous decomposition products: carbon monoxide, tetrahydrofuran

Thermal decomposition:

> 290 °C

Thermal decomposition above the indicated temperature is possible.

11. Toxicological information

Irritation / corrosion



Safety Data Sheet

ULTRADUR® B 4300 G4 BLACK 05110 POLYBUTYLENE TEREPHTHALATE

Revision date : 2013/05/28
Version: 1.0

Page: 5/7
(30036529/SDS_GEN_US/EN)

Information on: Ultradur PBT

Repeated dose toxicity

Information on: Carbon black

Assessment of repeated dose toxicity:

Prolonged inhalation exposures may produce cough, phlegm, tiredness, chest pain and headache. Chronic exposures have been known to produce pneumoconiosis (chronic inflammatory and fibrotic lung disease).

Information on: Fiberglass

Carcinogenicity

Information on: carbon black

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: Glass, oxide, chemicals

EU-classification Results from poorly documented long-term studies in rats indicated a carcinogenic potential.

IARC (International Agency for Research on Cancer) has classified this substance as group 2B (The agent is possibly carcinogenic to humans). NTP listed carcinogen

Aspiration Hazard:

No aspiration hazard expected.

Other 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

Bioaccumulation

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.

Container disposal:

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

14. Transport Information

Land transport



Safety Data Sheet

ULTRADUR® B 4300 G4 BLACK 05110 POLYBUTYLENE TEREPHTHALATE

Revision date : 2013/05/28
Version: 1.0

Page: 6/7
(30036529/SDS_GEN_US/EN)

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

MA, NJ, PA
MA, NJ, PA

CAS Number

65997-17-3
1333-86-4

Chemical name

Glass, oxide, chemicals
carbon black

CA Prop. 65:

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

16. Other Information

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

HMIS III rating

Health: 1 Flammability: 1 Physical hazard: 0

NFPA and HMIS use a numbering scale ranging from 0 to 4 to indicate the degree of hazard. A value of zero means that the substance possesses essentially no hazard; a rating of four indicates extreme danger. Although similar, the two rating systems are intended for different purposes, and use different criteria. The NFPA system was developed to provide an on-the-spot alert to the hazards of a material, and their severity, to emergency responders. The HMIS system was designed to communicate workplace hazard information to employees who handle hazardous chemicals.

We support worldwide Responsible Care® initiatives. We value the health and safety of our employees, customers, suppliers and neighbors, and the protection of the environment. Our commitment to Responsible Care is integral to conducting our business and operating our facilities in a safe and environmentally responsible fashion, supporting our customers and suppliers in ensuring the safe and environmentally sound handling of our products, and minimizing the impact of our operations on society and the environment during production, storage, transport, use and disposal of our products.



Safety Data Sheet

ULTRADUR® B 4300 G4 BLACK 05110 POLYBUTYLENE TEREPHTHALATE

Revision date : 2013/05/28

Version: 1.0

Page: 7/7

(30036529/SDS_GEN_US/EN)

SDS Prepared by:

BASF NA Product Regulations

msds@basf.com

SDS Prepared on: 2013/05/28

ULTRADUR® B 4300 G4 BLACK 05110 POLYBUTYLENE TEREPHTHALATE is a registered trademark of BASF Corporation or BASF SE

IMPORTANT: WHILE THE DESCRIPTIONS, DESIGNS, DATA AND INFORMATION CONTAINED HEREIN ARE PRESENTED IN GOOD FAITH AND BELIEVED TO BE ACCURATE, IT IS PROVIDED FOR YOUR GUIDANCE ONLY. BECAUSE MANY FACTORS MAY AFFECT PROCESSING OR APPLICATION/USE, WE RECOMMEND THAT YOU MAKE TESTS TO DETERMINE THE SUITABILITY OF A PRODUCT FOR YOUR PARTICULAR PURPOSE PRIOR TO USE. NO WARRANTIES OF ANY KIND, EITHER EXPRESSED OR IMPLIED, INCLUDING WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE, ARE MADE REGARDING PRODUCTS DESCRIBED OR DESIGNS, DATA OR INFORMATION SET FORTH, OR THAT THE PRODUCTS, DESIGNS, DATA OR INFORMATION MAY BE USED WITHOUT INFRINGING THE INTELLECTUAL PROPERTY RIGHTS OF OTHERS. IN NO CASE SHALL THE DESCRIPTIONS, INFORMATION, DATA OR DESIGNS PROVIDED BE CONSIDERED A PART OF OUR TERMS AND CONDITIONS OF SALE. FURTHER, YOU EXPRESSLY UNDERSTAND AND AGREE THAT THE DESCRIPTIONS, DESIGNS, DATA, AND INFORMATION FURNISHED BY OUR COMPANY HEREUNDER ARE GIVEN GRATIS AND WE ASSUME NO OBLIGATION OR LIABILITY FOR THE DESCRIPTION, DESIGNS, DATA AND INFORMATION GIVEN OR RESULTS OBTAINED, ALL SUCH BEING GIVEN AND ACCEPTED AT YOUR RISK.

END OF DATA SHEET

