



The Chemical Company

Safety data sheet

ULTRADUR® B 4406 G4 BLACK 07110 POLYBUTYLENE TEREPHTHALATE

Revision date : 2006/04/26
Version: 1.0

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(30035777/MDS_GEN_US/EN)

1. Substance/preparation and company identification

Company
BASF CORPORATION
100 Campus Drive
Florham Park, NJ 07932, USA

24 Hour Emergency Response Information
CHEMTREC: 1-800-424-9300
BASF HOTLINE: 1-800-832-HELP

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

2. Composition/information on ingredients

| <u>CAS Number</u> | <u>Content (W/W)</u> | <u>Chemical name</u> |
|-------------------|----------------------|----------------------------------|
| 30965-26-5 | >= 30.0 % | polybutylene terephthalate (PBT) |
| 65997-17-3 | >= 10.0 - <= 30.0 % | Glass, oxide, chemicals |
| 1333-86-4 | <= 1.0 % | carbon black |
| | <= 6.0 % | Antimony compounds |

3. Hazard 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 protective clothing.
Eye wash fountains and safety showers must be easily accessible.

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:

Ingestion may cause gastrointestinal disturbances. Contact with molten product may cause thermal burns.

Information on: Antimony

Overexposure to Antimony dust or fumes may cause dermatitis, liver damage, severe irritation of the eyes, nasal passages, throat and lungs.

Irritation:

Irritation is possible when the product comes in contact with the skin, respiratory tract or the eyes.



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Information on: Ultradur PBT

ULTRADUR PBT resin in pellet form is not expected to be hazardous.

Repeated dose toxicity:

Information on: Antimony

Chronic exposures to antimony may cause indigestion, loss of appetite, diarrhea, muscular pains, and dizziness. Chronic inhalation can cause pneumoconiosis. Cardiac complications from therapeutic use have been reported. A study of female workers exposed to antimony compounds revealed higher incidences of spontaneous abortions, premature births, and gynecological problems. ACGIH lists the production of antimony trioxide as being suspect in causing cancer in humans. A retrospective study revealed an increased incidence of lung cancer among antimony smelter workers. IARC has included antimony in Group 2B.

Information on: Carbon black

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

This product contains glass fibers which are compounded into the polymer matrix and thus are not expected to present the same hazards as fiberglass wool.

Information on: Fiberglass

Animal implantation studies have indicated that fiberglass wool is an animal carcinogen. A small study of Canadian glass wool workers reported a statistically significant increase in deaths due to lung cancer; however, animal inhalation studies and several large-scale studies of U.S. and European fiberglass wool workers have shown no statistically significant increases in lung cancer. The International Agency for Research on Cancer (IARC) has classified this material in Category 2B.

Information on: Fiberglass

These findings are based on glass wool, which has a smaller diameter than continuous glass filament or glass fiber chopped strands or rovings. Fiberglass wool is not used in this product.

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. Immediate medical attention required.

If on skin:

Burns caused by molten material require hospital treatment.

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:

Rinse mouth and then drink plenty of water. Induce vomiting. Immediate medical attention required.

5. Fire-fighting measures

Flash point:

Autoignition:

> 350 °C

No data available.

(ASTM D1929)

Suitable extinguishing media:

water, foam, dry extinguishing media



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Hazards during fire-fighting:

carbon monoxide, tetrahydrofuran, hydrogen halides, brominated dibenzodioxins 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:

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

Environmental precautions:

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

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

General advice:

Avoid dust formation. Exhaust ventilation at processing machines is required during thermal processing and/or machining. Cleaning of product-contaminated machine parts with open flames should be avoided. If task are carried out with open flames, ventilation measures are mandatory.

Protection against fire and explosion:

Take precautionary measures against static discharges.

Storage

General advice:

Keep container tightly closed.

Storage stability:

Protect against moisture.

8. Exposure controls and personal protection

Components with workplace control parameters

Glass, oxide, chemicals

| | | |
|--------------|-------|---|
| | ACGIH | TWA value 5 mg/m ³ Inhalable fraction ; TWA value 1 fibers/cm ³ Fiber ; TWA value 1 fibers/cm ³ Fiber ; TWA value 0.2 fibers/cm ³ Fiber ; |
| carbon black | OSHA | PEL 3.5 mg/m ³ ; |
| | ACGIH | TWA value 3.5 mg/m ³ ; |

Advice on system design:

Provide local exhaust ventilation to control dusts/vapours.



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Personal protective equipment

Respiratory protection:

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

Hand protection:

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

Eye protection:

Tightly fitting safety goggles (chemical goggles).

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: | granules | |
| Odour: | odourless | |
| Colour: | various, depending on the colourant | |
| pH value: | | No data available. |
| melting range: | 220 - 230 °C | (DIN 53736) |
| Density: | 1.60 - 1.70 g/cm ³ | (EN/ISO 1183-1) |
| Bulk density: | 600 - 800 kg/m ³ | |
| Solubility in water: | | insoluble |

10. Stability and reactivity

Decomposition products:

Hazardous decomposition products: carbon monoxide, tetrahydrofuran, Danger by forming of toxic pyrolytic products.

Thermal decomposition:

> 290 °C

To avoid thermal decomposition, do not overheat.

11. Toxicological information

Chronic toxicity

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

Environmental fate and transport

Biodegradation:

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



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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.

Must be dumped or incinerated in accordance with local regulations.

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:

TSCA, US

released / listed

SARA 313:

CAS Number

Chemical name

Antimony compounds

State regulations

State RTK

CAS Number

65997-17-3

1333-86-4

Chemical name

Glass, oxide, chemicals

carbon black

State RTK

MA, NJ, PA

MA, NJ, PA



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16. Other information

Local contact information

Tech Desk

1-800-527-8324

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