1. Identification

Product identifier used on the label

ULTRADUR® B 4406 UNCOLORED 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
Synonyms: Poly(butylene terephthalate)

2. Hazards Identification


Classification of the product

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

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

4. First-Aid Measures

Description of first aid measures

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

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

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

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

5. Fire-Fighting Measures

Extinguishing media

Suitable extinguishing media:
water spray, foam, dry powder

Special hazards arising from the substance or mixture
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.

**Advice for fire-fighters**
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.

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### 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**
No special precautions necessary.

**Methods and material for containment and cleaning up**
Sweep/shovel up. Avoid raising dust.

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### 7. Handling and Storage

**Precautions for safe handling**
Avoid dust formation.

Exhaust ventilation at processing machines is required during thermal processing and/or machining. However, if dust formulation occurs at processing / finishing processing steps like regranulation, mechanical machining (for example drilling, grinding etc.) provide suitable exhaust ventilation.

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.

**Conditions for safe storage, including any incompatibilities**

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. Avoid deposition of dust. Protect against moisture.

**Storage stability:**
Protect against moisture.
8. Exposure Controls/Personal Protection

Advice on system design:
Provide local exhaust ventilation to control dusts/vapours.

Personal protective equipment

Respiratory protection:
Breathing protection if breathable aerosols/dust are formed. Wear respiratory protection if ventilation is inadequate. Particle filter with high efficiency for solid and liquid particles (e.g. EN 143 or 149, Type P3 or FFP3).

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 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:
The product contains dangerous ingredients (see paragraph 2, SDS), which are embedded in plastic and are only set free when milled. Avoid inhalation of dusts/mists/vapours. Wash soiled clothing immediately.

9. Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form</td>
<td>granules</td>
</tr>
<tr>
<td>Odour</td>
<td>odourless</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>not applicable</td>
</tr>
<tr>
<td>Colour</td>
<td>various, depending on the colourant</td>
</tr>
<tr>
<td>pH value</td>
<td>not applicable</td>
</tr>
<tr>
<td>Melting range</td>
<td>220 - 230 °C</td>
</tr>
<tr>
<td>Boiling range</td>
<td>The substance / product decomposes therefore not determined.</td>
</tr>
<tr>
<td>Sublimation point</td>
<td>No applicable information available.</td>
</tr>
<tr>
<td>Flash point</td>
<td>not applicable</td>
</tr>
<tr>
<td>Flammability</td>
<td>not self-igniting</td>
</tr>
<tr>
<td>Flammability of Aerosol</td>
<td>not applicable, the product does not form flammable aerosoles</td>
</tr>
<tr>
<td>Products</td>
<td></td>
</tr>
<tr>
<td>Lower explosion limit</td>
<td>For solids not relevant for classification and labelling.</td>
</tr>
<tr>
<td>Upper explosion limit</td>
<td>For solids not relevant for classification and labelling.</td>
</tr>
<tr>
<td>Autoignition</td>
<td>&gt; 350 °C (ASTM D1929)</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>not applicable</td>
</tr>
<tr>
<td>Density</td>
<td>1.40 - 1.50 g/cm³ (20 °C) (EN ISO 1183-1)</td>
</tr>
<tr>
<td>Relative density</td>
<td>Study does not need to be conducted.</td>
</tr>
<tr>
<td>Bulk density</td>
<td>600 - 900 kg/m³ (DIN 53466)</td>
</tr>
<tr>
<td>Vapour density</td>
<td>not applicable</td>
</tr>
</tbody>
</table>
10. Stability and Reactivity

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

Oxidizing properties:
not fire-propagating

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

Possibility of hazardous reactions

Conditions to avoid
Temperature: > 290 degrees Celsius

Incompatible materials
No substances known that should be avoided.

Hazardous decomposition products

Decomposition products:
Hazardous decomposition products: carbon monoxide, tetrahydrofuran, carbon dioxide, terephthalic acid, Water, Danger by forming of toxic pyrolytic products.

Thermal decomposition:
> 290 °C
To avoid thermal decomposition, do not overheat.

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

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

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

Information on: diantimony trioxide
Assessment of irritating effects: Not irritating to eyes and skin.
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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
May be harmful if swallowed and enters airways.

Chronic Toxicity/Effects

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

Information on: diantimony trioxide
Assessment of carcinogenicity: IARC (International Agency for Research on Cancer) has classified this substance as group 2B (The agent is possibly carcinogenic to humans).
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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.

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.

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### 13. Disposal considerations

**Waste disposal of substance:**
Check for possible recycling. Observe national and local legal requirements. Dispose of as hazardous waste in compliance with national waste legislation requirements and local regulations.

**Container disposal:**
Packs must be completely emptied. Completely emptied packagings can be given for recycling.

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### 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

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### 15. Regulatory Information

**Federal Regulations**

**Registration status:**
Chemical TSCA, US released / listed

**EPCRA 311/312 (Hazard categories):** Refer to SDS section 2 for GHS hazard classes applicable for this product.

**EPCRA 313:**

**CAS Number** Chemical name
ULTRADUR® B 4406 UNCOLORED POLYBUTYLENE TEREPTHALATE

Revision date: 2018/01/01
Version: 2.0

1309-64-4 diantimony trioxide

CERCLA RQ | CAS Number | Chemical name
---|---|---
1000 LBS | 1309-64-4 | diantimony trioxide

State regulations

<table>
<thead>
<tr>
<th>State RTK</th>
<th>CAS Number</th>
<th>Chemical name</th>
</tr>
</thead>
<tbody>
<tr>
<td>PA</td>
<td>1309-64-4</td>
<td>diantimony trioxide</td>
</tr>
<tr>
<td>MA</td>
<td>1309-64-4</td>
<td>diantimony trioxide</td>
</tr>
<tr>
<td>NJ</td>
<td>1309-64-4</td>
<td>diantimony trioxide</td>
</tr>
</tbody>
</table>

Safe Drinking Water & Toxic Enforcement Act, CA Prop. 65:

WARNING: This product can expose you to chemicals including ANTIMONY OXIDE (ANTIMONY TRIOXIDE), which is known to the State of California to cause cancer. For more information, go to www.P65Warnings.ca.gov.

[Other Prop 65 components may be present in the product.]

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
SDS Prepared on: 2018/01/01

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