1. Identification

Product identifier used on the label

ULTRADUR® B4450 G5 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
Synonyms: polybutylene 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. The dangerous ingredients are fixed in a polymer matrix.

**Hazards not otherwise classified**

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

### 3. Composition / Information on Ingredients


<table>
<thead>
<tr>
<th>CAS Number</th>
<th>Weight %</th>
<th>Chemical name</th>
</tr>
</thead>
<tbody>
<tr>
<td>37640-57-6</td>
<td>&gt;=1.0 - &lt;=11.0%</td>
<td>1,3,5-Triazine-2,4,6(1H,3H,5H)-trione, compd. with 1,3,5-triazine-2,4,6-triamine (1:1)</td>
</tr>
<tr>
<td>7784-22-7</td>
<td>&gt;=1.0 - &lt;=13.0%</td>
<td>Phosphinic acid, aluminum salt</td>
</tr>
</tbody>
</table>

### 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:**
Wash thoroughly with soap and water. 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.

**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.
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:
Phosphine, hydrogen cyanide, carbon monoxide, tetrahydrofuran,
The substances/groups of substances mentioned can be released in case of fire. 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:
In case of combustion evolution of toxic gases/vapours possible. 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

Wear suitable personal protective clothing and equipment. Handle in accordance with good industrial hygiene and safety practice.

Environmental precautions

No special precautions necessary.

Methods and material for containment and cleaning up

Sweep/shovel up. Avoid raising dust.

7. Handling and Storage

Precautions for safe handling

Avoid inhalation of dusts/mists/vapours. Exhaust ventilation at processing machines is required during thermal processing and/or machining.

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.
8. Exposure Controls/Personal Protection

**Components with occupational exposure limits**
Glass, oxide, chemicals

ACGIH TLV  TWA value  5 mg/m³ Inhalable fraction ; TWA value  1 fibers/cm³ Fiber ;
Respirable fibers: length > 5 micrometers; aspect ration >= 3:1, as determined by the membrane filter method at 400-450X magnification (4-mm objective), using phase-contrast illumination.

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

**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:**
Safety glasses with side-shields. Wear safety goggles (chemical goggles) if there is potential for airborne dust exposures.

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

**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. After use of gloves apply skin-cleaning agents and skin cosmetics.

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. (DIN 53736)</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>
</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
The product is chemically stable.
No hazardous reactions known.

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, terephthalic acid, tetrahydrofuran, carbon dioxide, Water, hydrogen cyanide, Phosphine
Thermal decomposition:
> 290 °C
Thermal decomposition above the indicated temperature is possible.

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.

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

Persistence and degradability
Assessment biodegradation and elimination (H2O)
Experience shows this product to be inert and non-degradable.

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

Additional information
Other ecotoxicological advice:
No (eco-)toxicological relevant migration of single components/contents takes place. The product is a polymeric compound.

13. Disposal considerations

Waste disposal of substance:
Dispose of in accordance with national, state and 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:**
Chemical TSCA, US released / listed

**EPCRA 311/312 (Hazard categories):** Not hazardous;

**State regulations**

<table>
<thead>
<tr>
<th>State RTK</th>
<th>CAS Number</th>
<th>Chemical name</th>
</tr>
</thead>
<tbody>
<tr>
<td>NJ</td>
<td>65997-17-3</td>
<td>Glass, oxide, chemicals</td>
</tr>
<tr>
<td>PA</td>
<td>65997-17-3</td>
<td>Glass, oxide, chemicals</td>
</tr>
</tbody>
</table>

**NFPA Hazard codes:**
Health: 1 Fire: 1 Reactivity: 1 Special:

**HMIS III rating**
Health: 1 Flammability: 1 Physical hazard: 1

16. Other Information

**SDS Prepared by:**
BASF NA Product Regulations
SDS Prepared on: 2017/05/17

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operations on society and the environment during production, storage, transport, use and disposal of our products.

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