

## Safety Data Sheet

# ULTRADUR® B4450 G5 UNCOLORED POLYBUTYLENE TEREPHTHALATE

Revision date : 2017/05/17

Version: 2.0

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(30571495/SDS\_GEN\_US/EN)

### 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

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### 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.

#### Label elements

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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

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

| <u>CAS Number</u> | <u>Weight %</u>   | <u>Chemical name</u>   |
|-------------------|-------------------|--|
| 37640-57-6        | >= 1.0 - <= 11.0% | 1,3,5-Triazine-2,4,6(1H,3H,5H)-trione, compd. with 1,3,5-triazine-2,4,6-triamine (1:1) |
| 7784-22-7         | >= 1.0 - <= 13.0% | Phosphinic acid, aluminum salt   |

### 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.

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### 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.

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Storage stability:  
Protect against moisture.

### 8. Exposure Controls/Personal Protection

#### Components with occupational exposure limits

Glass, oxide, chemicals

ACGIH TLV TWA value 5 mg/m<sup>3</sup> Inhalable fraction ; TWA value 1 fibers/cm<sup>3</sup> 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.

#### **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

|                    |  |
|--------------------|--|
| Form:              | granules   |
| Odour:             | odourless  |
| Odour threshold:   | not applicable   |
| 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. |
| Sublimation point: | No applicable information available.                         |
| Flash point:       | not applicable   |
| Flammability:      | not self-igniting  |

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|   |  |                 |
|---|--|-----------------|
| Flammability of Aerosol Products:                   | not applicable, the product does not form flammable aerosoles                  |                 |
| Lower explosion limit:                              | For solids not relevant for classification and labelling.                      |                 |
| Upper explosion limit:                              | For solids not relevant for classification and labelling.                      |                 |
| Autoignition:                                       | > 350 °C   | (ASTM D1929)    |
| Vapour pressure:                                    | not applicable   |                 |
| Density:  | > 1 g/cm <sup>3</sup><br>( 20 °C)  | (EN ISO 1183-1) |
| Relative density:                                   | Study does not need to be conducted.   |                 |
| Bulk density:                                       | 600 - 900 kg/m <sup>3</sup>  | (DIN 53466)     |
| Vapour density:                                     | not applicable   |                 |
| Partitioning coefficient n-octanol/water (log Pow): | not applicable   |                 |
| Self-ignition temperature:                          | not self-igniting  |                 |
| Thermal decomposition:                              | > 290 °C<br>Thermal decomposition above the indicated temperature is possible. |                 |
| 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):                           | insoluble  |                 |
| Evaporation rate:                                   | The product is a non-volatile solid.   |                 |

## 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

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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.

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### 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.

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## 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 (H<sub>2</sub>O)

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.

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## 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.

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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):** Not hazardous;

**State regulations**

**State RTK**

NJ  
PA

**CAS Number**

65997-17-3  
65997-17-3

**Chemical name**

Glass, oxide, chemicals  
Glass, oxide, chemicals

**NFPA Hazard codes:**

Health : 1      Fire: 1      Reactivity: 1      Special:

**HMIS III rating**

Health: 1      Flammability: 1      Physical hazard: 1

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### 16. Other Information

**SDS Prepared by:**

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

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



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

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