

## Safety Data Sheet

### ULTRADUR® B 4406 UNCOLORED POLYBUTYLENE TEREPHTHALATE

Revision date : 2018/01/01

Version: 2.0

Page: 1/9

(30036534/SDS\_GEN\_US/EN)

#### 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: (C<sub>12</sub> H<sub>12</sub> O<sub>4</sub>)<sub>n</sub>  
Synonyms: Poly(butylene terephthalate)

---

#### 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

# Safety Data Sheet

## ULTRADUR® B 4406 UNCOLORED POLYBUTYLENE TEREPHTHALATE

Revision date : 2018/01/01  
Version: 2.0

Page: 2/9  
(30036534/SDS\_GEN\_US/EN)

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

# Safety Data Sheet

## ULTRADUR® B 4406 UNCOLORED POLYBUTYLENE TEREPHTHALATE

Revision date : 2018/01/01  
Version: 2.0

Page: 3/9  
(30036534/SDS\_GEN\_US/EN)

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.

---

## 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.

---

## 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 formation 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.

---

# Safety Data Sheet

## ULTRADUR® B 4406 UNCOLORED POLYBUTYLENE TEREPHTHALATE

Revision date : 2018/01/01  
Version: 2.0

Page: 4/9  
(30036534/SDS\_GEN\_US/EN)

### 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

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	
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:	1.40 - 1.50 g/cm3 (20 °C)	(EN ISO 1183-1)
Relative density:	Study does not need to be conducted.	
Bulk density:	600 - 900 kg/m3	(DIN 53466)
Vapour density:	not applicable	

# Safety Data Sheet

## ULTRADUR® B 4406 UNCOLORED POLYBUTYLENE TEREPHTHALATE

Revision date : 2018/01/01  
Version: 2.0

Page: 5/9  
(30036534/SDS\_GEN\_US/EN)

Partitioning coefficient n-octanol/water (log Pow):	not applicable
Self-ignition temperature:	not self-igniting
Thermal decomposition:	> 290 °C To avoid thermal decomposition, do not overheat.
Viscosity, kinematic:	not applicable, the product is a solid
Solubility in water:	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

#### 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.

# Safety Data Sheet

## ULTRADUR® B 4406 UNCOLORED POLYBUTYLENE TEREPHTHALATE

Revision date : 2018/01/01  
Version: 2.0

Page: 6/9  
(30036534/SDS\_GEN\_US/EN)

### 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.*

### 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).*

### 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:

# Safety Data Sheet

## ULTRADUR® B 4406 UNCOLORED POLYBUTYLENE TEREPHTHALATE

Revision date : 2018/01/01  
Version: 2.0

Page: 7/9  
(30036534/SDS\_GEN\_US/EN)

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.

---

## 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.

---

## 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):** Refer to SDS section 2 for GHS hazard classes applicable for this product.

#### **EPCRA 313:**

CAS Number

Chemical name

# Safety Data Sheet

## ULTRADUR® B 4406 UNCOLORED POLYBUTYLENE TEREPHTHALATE

Revision date : 2018/01/01  
Version: 2.0

Page: 8/9  
(30036534/SDS\_GEN\_US/EN)

1309-64-4      diantimony trioxide

**CERCLA RQ**

1000 LBS

**CAS Number**

1309-64-4

**Chemical name**

diantimony trioxide

**State regulations**

**State RTK**

PA

MA

NJ

**CAS Number**

1309-64-4

1309-64-4

1309-64-4

**Chemical name**

diantimony trioxide

diantimony trioxide

diantimony trioxide

**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](http://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

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.

ULTRADUR® B 4406 UNCOLORED 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



# Safety Data Sheet

## ULTRADUR® B 4406 UNCOLORED POLYBUTYLENE TEREPHTHALATE

Revision date : 2018/01/01

Page: 9/9

Version: 2.0

(30036534/SDS\_GEN\_US/EN)

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