

## Safety Data Sheet

# ULTRADUR® B 4406 UNCOLORED POLYBUTYLENE TEREPHTHALATE

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Version: 1.0

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(30036534/SDS\_GEN\_US/EN)

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### 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 US 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)

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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.

### Hazards not otherwise classified

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

### According to Regulation 1994 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

#### Emergency overview

##### CAUTION:

MAY CAUSE EYE, SKIN AND RESPIRATORY TRACT IRRITATION.

INGESTION MAY CAUSE GASTRIC DISTURBANCES.

Use with local exhaust ventilation.

Respiratory protection may not be required under normal operating conditions if adequate ventilation is provided.

Wear NIOSH-certified chemical goggles.

Wear protective clothing.

Eye wash fountains and safety showers must be easily accessible.

### 3. Composition / Information on Ingredients

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

<u>CAS Number</u>	<u>Content (W/W)</u>	<u>Chemical name</u>
1309-64-4	>= 5.0 - < 7.0 %	diantimony trioxide

#### According to Regulation 1994 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

<u>CAS Number</u>	<u>Content (W/W)</u>	<u>Chemical name</u>
30965-26-5	>= 30.0 - <= 50.0 %	polybutylene terephthalate (PBT)
26062-94-2	>= 30.0 - <= 50.0 %	polybutylene terephthalate (PBT)
94334-64-2	>= 10.0 - <= 20.0 %	Carbonic dichloride, polymer with 4,4'-(1-methylethylidene)bis[2,6- dibromophenol] and phenol
1309-64-4	>= 3.0 - <= 7.0 %	diantimony trioxide

### 4. First-Aid Measures

#### Description of first aid measures

##### General advice:

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

##### If inhaled:

Remove the affected individual into fresh air and keep the person calm. Assist in breathing if necessary. Consult a physician.

##### If on skin:

Burns caused by molten material require hospital treatment.

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### **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**

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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:

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), Stainless steel, aluminum

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

#### Components with occupational exposure limits

diantimony trioxide	OSHA PEL	PEL 0.5 mg/m <sup>3</sup> (antimony (Sb)); TWA value 0.5 mg/m <sup>3</sup> (antimony (Sb));
	ACGIH TLV	TWA value 0.5 mg/m <sup>3</sup> (antimony (Sb)); ; Included in the regulation, but with no data values - See the regulation for further details ; Exposure by all routes should be carefully controlled to levels as low as possible.

#### Advice on system design:

Provide local exhaust ventilation to control dusts/vapours.

#### Personal protective equipment

##### 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).

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### 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.
Flash point:		not applicable
Flammability:	not self-igniting	
:		not applicable, the product does not form flammable aerosoles)
Lower explosion limit:		The substance / product decomposes therefore not determined.
Autoignition:	> 350 °C	(ASTM D1929)
Vapour pressure:		not applicable
Density:	1.40 - 1.50 g/cm3	( 20 °C) (EN ISO 1183-1)
Relative density:		No data available.
Bulk density:	600 - 900 kg/m3	
Vapour density:		not applicable
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.

### 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.

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### 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: Skin contact causes irritation. May cause severe damage to the eyes.*

#### 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

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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.

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

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

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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;

#### EPCRA 313:

<u>CAS Number</u>	<u>Chemical name</u>
1309-64-4	diantimony trioxide

<u>CERCLA RQ</u>	<u>CAS Number</u>	<u>Chemical name</u>
1000 LBS	1309-64-4	diantimony trioxide

### State regulations

<u>State RTK</u>	<u>CAS Number</u>	<u>Chemical name</u>
MA, NJ, PA	1309-64-4	diantimony trioxide

#### CA Prop. 65:

WARNING: THIS PRODUCT CONTAINS A CHEMICAL(S) KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER.

#### 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: 2015/01/20

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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.

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