

# Safety data sheet

Page: 1/13

BASF Safety data sheet according to Regulation (EC) No. 1907/2006

Date / Revised: 27.09.2013

Version: 6.3

Product: **ULTRADUR® B 4406 G4 BLACK 07110 POLYBUTYLENE TEREPHTHALATE**

(ID no. 30035777/SDS\_GEN\_EU/EN)

Date of print 29.09.2013

## SECTION 1: Identification of the substance/mixture and of the company/undertaking

### 1.1. Product identifier

**ULTRADUR® B 4406 G4 BLACK 07110  
POLYBUTYLENE TEREPHTHALATE**

### 1.2. Relevant identified uses of the substance or mixture and uses advised against

Relevant identified uses: Polymer

### 1.3. Details of the supplier of the safety data sheet

Company:  
BASF SE  
67056 Ludwigshafen  
GERMANY

Telephone: +49 621 60-0  
E-mail address: [global.info@basf.com](mailto:global.info@basf.com)

### 1.4. Emergency telephone number

International emergency number:  
Telephone: +49 180 2273-112

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## SECTION 2: Hazards Identification

### 2.1. Classification of the substance or mixture

According to Regulation (EC) No 1272/2008 [CLP]

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

According to Directive 67/548/EEC or 1999/45/EC

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Possible Hazards:

An ingredient is classified in accordance with EC Directives as a carcinogen (Category 3).

The hazard refers to the dust of the product.

Danger of burns while handling the hot product.

## 2.2. Label elements

Globally Harmonized System, EU (GHS)

The product does not require a hazard warning label in accordance with GHS criteria.

According to Directive 67/548/EEC or 1999/45/EC

The product does not require a hazard warning label in accordance with EC Directives, the dangerous ingredients are fixed in a polymer matrix.

## 2.3. Other hazards

According to Regulation (EC) No 1272/2008 [CLP]

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

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## SECTION 3: Composition/Information on Ingredients

### 3.1. Substances

Not applicable

### 3.2. Mixtures

Chemical nature

Compound based on: polybutylene terephthalate (PBT)

additives, fillers, flameproofing agent, antimony trioxide

Hazardous ingredients (GHS)

according to Regulation (EC) No. 1272/2008

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antimony trioxide

Content (W/W): $\geq 1\%$ - $\leq 7\%$	Eye Dam./Irrit. 1
CAS Number: 1309-64-4	Carc. 2
EC-Number: 215-175-0	H318, H351
REACH registration number: 01-2119475613-35	
INDEX-Number: 051-005-00-X	

#### Hazardous ingredients

according to Directive 1999/45/EC

antimony trioxide

Content (W/W): $\geq 1\%$ - $\leq 7\%$
CAS Number: 1309-64-4
EC-Number: 215-175-0
REACH registration number: 01-2119475613-35
INDEX-Number: 051-005-00-X
Hazard symbol(s): Xn
R-phrases(s): 41, 40
Carc. Cat. 3

For the classifications not written out in full in this section, including the indication of danger, the hazard symbols, the R phrases, and the hazard statements, the full text is listed in section 16.

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## SECTION 4: First-Aid Measures

### 4.1. Description of first aid measures

Avoid contact with the skin, eyes and clothing.

If inhaled:

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

On skin contact:

Burns caused by molten material require hospital treatment.

On contact with eyes:

If irritation develops, seek medical attention. In case of contact with the eyes, rinse immediately for at least 15 minutes with plenty of water.

On ingestion:

Rinse mouth and then drink plenty of water. If difficulties occur: Seek medical attention.

### 4.2. 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.

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#### **4.3. Indication of any immediate medical attention and special treatment needed**

Treatment: Treat symptomatically.

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### **SECTION 5: Fire-Fighting Measures**

#### **5.1. Extinguishing media**

Suitable extinguishing media:

water spray, foam, dry powder

#### **5.2. Special hazards arising from the substance or mixture**

At temperatures of > 290 °C can be emitted: carbon monoxide, tetrahydrofuran, hydrogen halides, brominated dibenzodioxins

Under special fire conditions traces of other toxic substances are possible. Formation of further decomposition and oxidation products depends upon the fire conditions.

#### **5.3. Advice for fire-fighters**

Further information:

Dispose of fire debris and contaminated extinguishing water in accordance with official regulations.

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### **SECTION 6: Accidental Release Measures**

High risk of slipping due to leakage/spillage of product.

#### **6.1. Personal precautions, protective equipment and emergency procedures**

No special precautions necessary.

#### **6.2. Environmental precautions**

No special precautions necessary.

#### **6.3. Methods and material for containment and cleaning up**

Sweep/shovel up. Avoid raising dust.

#### **6.4. Reference to other sections**

Information regarding exposure controls/personal protection and disposal considerations can be found in section 8 and 13.

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### **SECTION 7: Handling and Storage**

#### **7.1. 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.

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Protection against fire and explosion:

Take precautionary measures against static discharges.

## 7.2. Conditions for safe storage, including any incompatibilities

Suitable materials for containers: Low density polyethylene (LDPE), High density polyethylene (HDPE), Stainless steel, aluminum

Storage stability:

Protect against moisture.

## 7.3. Specific end use(s)

For the relevant identified use(s) listed in Section 1 the advice mentioned in this section 7 is to be observed.

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## SECTION 8: Exposure Controls/Personal Protection

### 8.1. Control parameters

#### Components with occupational exposure limits

1309-64-4: antimony trioxide

The limit values will not be achieved if the product is processed proper and suitable ventilation is provided.

### 8.2. Exposure controls

#### 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:

Use additional heat protection gloves when handling hot molten masses (EN 407), e.g. of textile or leather.

Eye protection:

Safety glasses with side-shields (frame goggles) (e.g. EN 166)

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

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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. When using, do not eat, drink or smoke. Keep separated from food stuffs and feed stocks. Hands and/or face should be washed before breaks and at the end of the shift. After use of gloves apply skin-cleaning agents and skin cosmetics.

## SECTION 9: Physical and Chemical Properties

### 9.1. Information on basic physical and chemical properties

Form:	granules	
Colour:	various, depending on the colourant	
Odour:	odourless	
Odour threshold:	not applicable	
pH value:	not applicable	
melting range:	220 - 230 °C	(DIN 53736)
Boiling range:	The substance / product decomposes therefore not determined.	
Flash point:	not applicable	
Evaporation rate:	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.	
Ignition temperature:	> 350 °C	(ASTM D1929)
Vapour pressure:	not applicable	
Density:	1.60 - 1.70 g/cm <sup>3</sup> (20 °C)	(EN ISO 1183-1)
Relative density:	No data available.	
Relative vapour density (air):	not applicable	
Solubility in water:	insoluble	
Partitioning coefficient n-octanol/water (log Kow):	not applicable	
Self ignition:	not self-igniting	
Thermal decomposition:	> 290 °C To avoid thermal decomposition, do not overheat.	

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Viscosity, kinematic:

not applicable, the product is a solid

## 9.2. Other information

Bulk density:

600 - 900 kg/m<sup>3</sup>

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## SECTION 10: Stability and Reactivity

### 10.1. Reactivity

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

### 10.2. Chemical stability

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

### 10.3. Possibility of hazardous reactions

No hazardous reactions known.

The product is chemically stable.

### 10.4. Conditions to avoid

Temperature: > 290 °C

### 10.5. Incompatible materials

Substances to avoid:

No substances known that should be avoided.

### 10.6. Hazardous decomposition products

Hazardous decomposition products:

carbon monoxide, tetrahydrofuran, Terephthalic acid, Carbon dioxide, Water

Danger by forming of toxic pyrolytic products.

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## SECTION 11: Toxicological Information

### 11.1. Information on toxicological effects

#### Acute toxicity

Assessment of acute toxicity:

Contact with molten product may cause thermal burns.

#### Irritation

Assessment of irritating effects:

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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Experimental/calculated data:

Serious eye damage/irritation: May cause mechanical irritation.

Respiratory/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.

Germ cell mutagenicity

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. The ingredient of concern is tightly bound within the product (practically not bioavailable).

There is no formation of respirable dust during intended uses. However, if dust formation occurs at processing/finishing processing steps like regranulation, mechanical machining (for example drilling, grinding etc.), occupational protection regulations have to be considered. Release and inhalative resorption from respirable dust (fine dust), however, cannot be excluded. If dust is formed, the substances can be released, which caused cancer by inhalation in animal studies.

*Information on: antimony trioxide**Assessment of carcinogenicity:**Indication of possible carcinogenic effect in animal tests. IARC (International Agency for Research on Cancer) has classified this substance as group 2B (The agent is possibly carcinogenic to humans).*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.

Specific target organ toxicity (single exposure)

Assessment of STOT single:

not applicable

Repeated dose toxicity and Specific target organ toxicity (repeated exposure)

Assessment of repeated dose toxicity:



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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.

#### Other relevant toxicity 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.

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## **SECTION 12: Ecological Information**

### **12.1. 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.

### **12.2. Persistence and degradability**

Assessment biodegradation and elimination (H<sub>2</sub>O):

Experience shows this product to be inert and non-degradable.

The product is virtually insoluble in water and can thus be separated from water mechanically in suitable effluent treatment plants.

### **12.3. Bioaccumulative potential**

Bioaccumulation potential:

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

### **12.4. Mobility in soil**

Assessment transport between environmental compartments:

Study scientifically not justified.

### **12.5. Results of PBT and vPvB assessment**

The product does not fulfill the criteria for PBT (Persistent/bioaccumulative/toxic) and vPvB (very persistent/very bioaccumulative).

### **12.6. Other adverse effects**

The product does not contain substances that are listed in Regulation (EC) 1005/2009 on substances that deplete the ozone layer.

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## SECTION 13: Disposal Considerations

### 13.1. Waste treatment methods

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.

Contaminated packaging:

Packs must be completely emptied.

Completely emptied packagings can be given for recycling.

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## SECTION 14: Transport Information

### Land transport

ADR

Not classified as a dangerous good under transport regulations

UN number: Not applicable

UN proper shipping name: Not applicable

Transport hazard class(es): Not applicable

Packing group: Not applicable

Environmental hazards: Not applicable

Special precautions for user: None known

RID

Not classified as a dangerous good under transport regulations

UN number: Not applicable

UN proper shipping name: Not applicable

Transport hazard class(es): Not applicable

Packing group: Not applicable

Environmental hazards: Not applicable

Special precautions for user: None known

### Inland waterway transport

ADN

Not classified as a dangerous good under transport regulations

UN number: Not applicable

UN proper shipping name: Not applicable

Transport hazard class(es): Not applicable

Packing group: Not applicable

Environmental hazards: Not applicable

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Special precautions for user	None known
Transport in inland waterway vessel:	Not evaluated

**Sea transport**

## IMDG

	Not classified as a dangerous good under transport regulations
UN number:	Not applicable
UN proper shipping name:	Not applicable
Transport hazard class(es):	Not applicable
Packing group:	Not applicable
Environmental hazards:	Not applicable
Special precautions for user	None known

**Air transport**

## IATA/ICAO

	Not classified as a dangerous good under transport regulations
UN number:	Not applicable
UN proper shipping name:	Not applicable
Transport hazard class(es):	Not applicable
Packing group:	Not applicable
Environmental hazards:	Not applicable
Special precautions for user	None known

**14.1. UN number**

See corresponding entries for "UN number" for the respective regulations in the tables above.

**14.2. UN proper shipping name**

See corresponding entries for "UN proper shipping name" for the respective regulations in the tables above.

**14.3. Transport hazard class(es)**

See corresponding entries for "Transport hazard class(es)" for the respective regulations in the tables above.

**14.4. Packing group**

See corresponding entries for "Packing group" for the respective regulations in the tables above.

**14.5. Environmental hazards**

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See corresponding entries for "Environmental hazards" for the respective regulations in the tables above.

**14.6. Special precautions for user**

See corresponding entries for "Special precautions for user" for the respective regulations in the tables above.

**14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code**

Regulation:	Not evaluated
Shipment approved:	Not evaluated
Pollution name:	Not evaluated
Pollution category:	Not evaluated
Ship Type:	Not evaluated

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**SECTION 15: Regulatory Information****15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture****15.2. Chemical Safety Assessment**

Chemical Safety Assessment not required

Product is not classified as hazardous.

A safety data sheet for this product is legally not required and is provided by us just as a courtesy to our customers.

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**SECTION 16: Other Information**

Information on intended use: Do not mill or crush the product. Must not be used in spray form.

Full text of the classifications, including the indication of danger, the hazard symbols, the R phrases, and the hazard statements, if mentioned in section 2 or 3:

Xn	Harmful.
41	Risk of serious damage to eyes.
40	Limited evidence of a carcinogenic effect.
Eye Dam./Irrit.	Serious eye damage/eye irritation
Carc.	Carcinogenicity
Carc. Cat. 3	Carcinogenic substances Category 3: Substances which cause concern for man owing to possible carcinogenic effects.
H318	Causes serious eye damage.
H351	Suspected of causing cancer.

The data contained in this safety data sheet are based on our current knowledge and experience and describe the product only with regard to safety requirements. The data do not describe the product's properties (product specification). Neither should any agreed property nor the suitability of the product for any specific purpose be deduced from the data contained in the safety data sheet. It is the responsibility

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of the recipient of the product to ensure any proprietary rights and existing laws and legislation are observed.

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