

Safety data sheet

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

Date / Revised: 08.10.2013

Version: 1.2

Product: **ULTRADUR® B4450 G5 GREY 35399 POLYBUTYLENE TEREPHTHALATE**

(ID no. 30570502/SDS_GEN_EU/EN)

Date of print 10.10.2013

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

1.1. Product identifier

**ULTRADUR® B4450 G5 GREY 35399
POLYBUTYLENE TEREPHTHALATE**

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

Recommended use: Polymer, for industrial processing only

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

1.4. Emergency telephone number

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

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:

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

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.

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.

SECTION 3: Composition/Information on Ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Chemical nature

Compound based on: polybutylene terephthalate (PBT)

fillers, additives, flameproofing agent, free of halogens

Hazardous ingredients (GHS)

according to Regulation (EC) No. 1272/2008

1,3,5-Triazine-2,4,6(1H,3H,5H)-trione, compound with 1,3,5-triazine-2,4,6-triamine (1:1)

Content (W/W): $\geq 1\%$ - $\leq 11\%$ STOT RE (Kidney) 2

CAS Number: 37640-57-6 H373

EC-Number: 253-575-7

REACH registration number: 01-

2119510711-53

Phosphinic acid, aluminum salt

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Content (W/W): $\geq 1\%$ - $\leq 13\%$

CAS Number: 7784-22-7

Hazardous ingredients

according to Directive 1999/45/EC

1,3,5-Triazine-2,4,6(1H,3H,5H)-trione, compound with 1,3,5-triazine-2,4,6-triamine (1:1)

Content (W/W): $\geq 1\%$ - $\leq 11\%$

CAS Number: 37640-57-6

EC-Number: 253-575-7

REACH registration number: 01-2119510711-53

Hazard symbol(s): Xn

R-phrases: 48/22

Phosphinic acid, aluminum salt

Content (W/W): $\geq 1\%$ - $\leq 13\%$

CAS Number: 7784-22-7

Hazard symbol(s): F

R-phrases: 11

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.

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.

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

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Treatment: Treat symptomatically.

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

phosphine, hydrogen cyanide; hydrocyanic acid, 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.

5.3. Advice for fire-fighters

Special protective equipment:
Wear a self-contained breathing apparatus.

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.

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.

SECTION 7: Handling and Storage

7.1. Precautions for safe handling

Provide suitable exhaust ventilation at the drying process and in the area surrounding the melt outlet of processing machines. Closed containers should only be opened in well-ventilated areas. Ensure thorough ventilation of stores and work areas.

Any short stoppages in production, it is recommended that you inject material into the mould not purge an air shot. Any molten material drooling from the machine nozzle or hot runner nozzles can self-ignite when in open atmosphere.

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It is therefore advisable to dispose of purgings etc into water containers.

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.

SECTION 8: Exposure Controls/Personal Protection

8.1. Control parameters

Components with occupational exposure limits

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 medium efficiency for solid and liquid particles (e.g. EN 143 or 149, Type P2 or FFP2)

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)

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.

SECTION 9: Physical and Chemical Properties

9.1. Information on basic physical and chemical properties

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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 aerosols)
Lower explosion limit:	The substance / product decomposes therefore not determined.	
Ignition temperature:	> 350 °C	(ASTM D1929)
Vapour pressure:	not applicable	
Density:	> 1 g/cm ³ (20 °C)	
Relative density:	No data available.	
Relative vapour density (air):	not applicable	
Solubility in water:	insoluble	
Partitioning coefficient n-octanol/water (log K _{ow}):	not applicable	
Self ignition:	not self-igniting	
Thermal decomposition:	> 290 °C Thermal decomposition above the indicated temperature is possible.	
Viscosity, kinematic:	not applicable, the product is a solid	

9.2. Other informationBulk density: 600 - 900 kg/m³**SECTION 10: Stability and Reactivity****10.1. Reactivity**

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

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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, Terephthalic acid, tetrahydrofuran, Carbon dioxide, Water, hydrogen cyanide;
hydrocyanic acid, phosphine

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.

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

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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.

CarcinogenicityAssessment 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 toxicityAssessment 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:

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.

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.

SECTION 12: Ecological Information**12.1. 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.

12.2. Persistence and degradabilityAssessment biodegradation and elimination (H₂O):

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

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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.

12.7. Additional information

Other ecotoxicological advice:

No (eco-)toxicological relevant migration of single components/contents takes place. The product is a polymeric compound.

SECTION 13: Disposal Considerations

13.1. Waste treatment methods

Check for possible recycling.

Incinerate in suitable incineration plant, observing local authority regulations.

Contaminated packaging:

Packs must be completely emptied.

Completely emptied packagings can be given for recycling.

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

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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
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

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Date of print 10.10.2013

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

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

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.

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

SECTION 16: Other Information

In addition to the information given in the safety data sheet we refer to the product specific 'Technical Information'.

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.
F	Highly flammable.
48/22	Harmful: danger of serious damage to health by prolonged exposure if swallowed.
11	Highly flammable.
STOT RE	Specific target organ toxicity — repeated exposure
H373	May cause damage to organs (Kidney) through prolonged or repeated exposure.

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

Vertical lines in the left hand margin indicate an amendment from the previous version.