Safety Data Sheet
ULTRADUR® B4406G3 UNCOLORED Q717 POLYBUTYLENE TEREPHTHALATE

1. Product and Company Identification

Company
BASF CORPORATION
100 Park Avenue
Florham Park, NJ 07932, USA

24 Hour Emergency Response Information
CHEMTREC: 1-800-424-9300
BASF HOTLINE: 1-800-832-HELP (4357)

Chemical family: polyamide

2. Hazards Identification

Emergency overview

CAUTION:
MAY CAUSE EYE, SKIN AND RESPIRATORY TRACT IRRITATION.
INGESTION MAY CAUSE GASTRIC DISTURBANCES.
Use with local exhaust ventilation.
Wear a NIOSH-certified (or equivalent) particulate respirator.
Wear NIOSH-certified chemical goggles.
Wear protective clothing.
Eye wash fountains and safety showers must be easily accessible.

State of matter: solid
Colour: various, depending on the colourant
Odour: odourless

Potential health effects

Primary routes of exposure:
Routes of entry for solids and liquids include eye and skin contact, ingestion and inhalation. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquified gases.

Acute toxicity:
Contact with molten product may cause thermal burns. The resin in pelleted form poses a low hazard.

Irritation / corrosion:
Thermal decomposition products of the substance can irritate the eyes, skin, and respiratory tract.

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.

Chronic toxicity:

Genotoxicity: Based on our experience and the information available, no adverse health effects are expected if handled as recommended with suitable precautions for designated uses.

Signs and symptoms of overexposure:
No significant reaction of the human body to the product known.

Potential environmental effects

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.

Degradation / environmental fate:
Experience shows this product to be inert and non-degradable.

3. Composition / Information on Ingredients

CAS Number	Content (W/W)	Chemical name
26062-94-2	>= 50.0 - <= 70.0 %	polybutylene terephthalate (PBT)
30965-26-5	>= 25.0 - <= 45.0 %	polybutylene terephthalate (PBT)
94334-64-2	>= 10.0 - <= 20.0 %	Carbonic dichloride, polymer with 4,4'-(1-methylethylidene)bis[2,6- dibromophenol] and phenol
65997-17-3	>= 10.0 - <= 20.0 %	Glass, oxide, chemicals
1309-64-4	>= 3.0 - <= 7.0 %	diantimony trioxide
25038-59-9	>= 1.0 - <= 5.0 %	Polyethyleneterephthalate (PET)
9002-88-4	>= 1.0 - <= 5.0 %	Polyethylene wax

4. First-Aid Measures

General advice:
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.

If in 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.

If swallowed:
Ingestion is not likely in the available physical form. If ingested, seek medical attention. Consult a physician.

5. Fire-Fighting Measures

Flash point:		not applicable
Autoignition:	> 350 °C	(ASTM D1929)
Self-ignition temperature:		not self-igniting

Suitable extinguishing media:
water spray, foam, dry powder

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.

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

Cleanup:
Sweep/shovel up. Avoid raising dust.

Further information:
High risk of slipping due to leakage/spillage of product.

7. Handling and Storage

Handling

General advice:
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.

Storage

General advice:
Keep container tightly closed. Avoid deposition of dust. Protect against moisture.

Storage stability:
Protect against moisture.

8. Exposure Controls and Personal Protection

Components with occupational exposure limits

diantimony trioxide	OSHA	PEL 0.5 mg/m3 (antimony (Sb));
	ACGIH	TWA value 0.5 mg/m3 (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.

Glass, oxide, chemicals

ACGIH	TWA value 5 mg/m3 Inhalable fraction ; TWA value 1 fibers/cm³ Fiber ; TWA value 1 fibers/cm³ Fiber ; TWA value 0.2 fibers/cm³ Fiber ;

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:
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.

9. Physical and Chemical Properties

Form:	granules	
Odour:	odourless	
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.
Vapour pressure:		not applicable
Density:	1.60 - 1.70 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
Solubility in water:		insoluble

10. Stability and Reactivity

Conditions to avoid:
Temperature: > 290 degrees Celsius

Substances to avoid:
No substances known that should be avoided.

Decomposition products:
Hazardous decomposition products: carbon monoxide, tetrahydrofuran, Danger by forming of toxic pyrolytic products.

Thermal decomposition:
> 290 °C
To avoid thermal decomposition, do not overheat.

11. Toxicological information

Irritation / corrosion

Information on: diantimony trioxide
Assessment of irritating effects:
Skin contact causes irritation. May cause severe damage to the eyes.

Repeated dose toxicity

Information on: diantimony trioxide
Assessment of repeated dose toxicity:
Repeated oral uptake of the substance did not cause substance-related effects. The substance may cause damage to the lung even after repeated inhalation of low doses, as shown in animal studies.

Carcinogenicity

Information on: diantimony trioxide
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).
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Aspiration Hazard:

May be harmful if swallowed and enters airways.

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.

12. Ecological Information

Degradability / Persistence
Biological / Abiological Degradation

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

Bioaccumulation

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): Not hazardous;

EPCRA 313:

CAS Number	Chemical name
1309-64-4	diantimony trioxide

CERCLA RQ	CAS Number	Chemical name
1000 LBS	1309-64-4	diantimony trioxide

State regulations

State RTK	CAS Number	Chemical name
MA, NJ, PA	65997-17-3	Glass, oxide, chemicals

CA Prop. 65:
THIS PRODUCT CONTAINS A CHEMICAL(S) KNOWN TO THE STATE OF CALIFORNIA TO CAUSE CANCER AND BIRTH DEFECTS OR OTHER REPRODUCTIVE HARM.

16. Other Information

Recommended use: Polymer for industrial processing only
Suitable for use in industrial sector: Polymers industry;

HMIS III rating
Health: 1 Flammability: 1 Physical hazard: 0

NFPA and HMIS use a numbering scale ranging from 0 to 4 to indicate the degree of hazard. A value of zero means that the substance possesses essentially no hazard; a rating of four indicates extreme danger. Although similar, the two rating systems are intended for different purposes, and use different criteria. The NFPA system was developed to provide an on-the-spot alert to the hazards of a material, and their severity, to emergency responders. The HMIS system was designed to communicate workplace hazard information to employees who handle hazardous chemicals.

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.

MSDS Prepared by:
BASF NA Product Regulations
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MSDS Prepared on: 2012/11/13

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

END OF DATA SHEET