1. Identification

Product identifier used on the label

ULTRADUR® S 4090 G4 BLACK 5110 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: (C12 H12 O4)N
Chemical family: polyester resin
Synonyms: Poly(butylene terephthalate) Ultradur

2. Hazards Identification


Classification of the product

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

The product does not require a hazard warning label in accordance with GHS criteria. The dangerous ingredients are fixed in a polymer matrix.

Hazards not otherwise classified

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

3. Composition / Information on Ingredients


<table>
<thead>
<tr>
<th>CAS Number</th>
<th>Weight %</th>
<th>Chemical name</th>
</tr>
</thead>
<tbody>
<tr>
<td>25038-59-9</td>
<td>&gt;= 0.0 - &lt; 15.0%</td>
<td>Polyethyleneterephthalate (PET)</td>
</tr>
<tr>
<td>1333-86-4</td>
<td>&gt;= 0.3 - &lt; 1.0%</td>
<td>carbon black</td>
</tr>
</tbody>
</table>

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. Immediate medical attention required.

If on skin: Wash affected areas thoroughly with soap and water. If irritation develops, seek medical attention.

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: 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

Note to physician
Treatment: Treat symptomatically.
5. Fire-Fighting Measures

**Extinguishing media**

Suitable extinguishing media:
water spray, dry powder, carbon dioxide, foam

**Special hazards arising from the substance or mixture**

Hazards during fire-fighting:
carbon monoxide, tetrahydrofuran, 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:
Firefighters should be equipped with self-contained breathing apparatus and turn-out gear.

**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**

This product is not regulated by RCRA. This product is not regulated by CERCLA ('Superfund').

**Methods and material for containment and cleaning up**

Reclaim for processing if possible. Sweep/shovel up. Place into suitable containers for reuse or disposal in a licensed facility.

7. Handling and Storage

**Precautions for safe handling**
Avoid inhalation of dusts/mists/vapours.

Protection against fire and explosion:
The product is capable of dust explosion. No explosion proofing necessary.

**Conditions for safe storage, including any incompatibilities**
The product in undamaged packing need not be stored separately.

Suitable materials for containers: Low density polyethylene (LDPE)

Further information on storage conditions: Keep container tightly closed.

**Storage stability:**
Protect against moisture.
8. Exposure Controls/Personal Protection

**Components with occupational exposure limits**

- **carbon black**
  - OSHA PEL: PEL 3.5 mg/m³; TWA value: 3.5 mg/m³;
  - ACGIH TLV: TWA value: 3 mg/m³; Inhalable fraction;

- **Glass, oxide, chemicals**
  - ACGIH TLV: TWA value: 5 mg/m³; Inhalable fraction; TWA value: 0.2 fibers/cm³; Fiber;

**Advice on system design:**
- Provide local exhaust ventilation to control dusts/vapours.

**Personal protective equipment**

**Respiratory protection:**
- Wear a NIOSH-certified (or equivalent) particulate respirator. Wear respiratory protection if ventilation is inadequate.

**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 based on level of activity and exposure.

**General safety and hygiene measures:**
- Wear protective clothing to prevent contact during mechanical processing and/or hot melt conditions.
- Avoid inhalation of dust. Wash soiled clothing immediately.

9. Physical and Chemical Properties

- **Form:** pellets
- **Odour:** odourless
- **Odour threshold:** not applicable
- **Colour:** black
- **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:** No data available.
- **Flammability:** not self-igniting (derived from flash point)
- **Flammability of Aerosol Products:** not applicable, the product does not form flammable aerosoles
- **Autoignition:** > 400 °C
- **Vapour pressure:** not applicable
- **Density:** 1.3 - 1.8 g/cm³ (20 °C) (EN ISO 1183-1)
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
The product is chemically stable.
No hazardous reactions known.

Conditions to avoid
Temperature: > 290 degrees Celsius

Incompatible materials

Hazardous decomposition products
Decomposition products:
carbon monoxide, carbon dioxide

Thermal decomposition:
298 - 400 °C

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

**Inhalation**
Not inhalable due to the physico-chemical properties of the product.

**Dermal**
Type of value: ATE
Value: > 5,000 mg/kg

**Assessment other acute effects**
No applicable information available.

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

**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**
No aspiration hazard expected.

### Chronic Toxicity/Effects

**Repeated dose toxicity**
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.

**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**
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.

**Information on: carbon black**
Assessment of carcinogenicity: IARC (International Agency for Research on Cancer) has classified this substance as group 2B (The agent is possibly carcinogenic to humans). In long-term animal studies in which the substance was given by inhalation in high concentrations, a carcinogenic effect was observed. A clear indication of an increased risk of cancer in humans has so far not been shown. No carcinogenic potential can be deduced from other studies with rats and mice.

**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.

Other Information
The product has not been tested. The statement has been derived from the properties of the individual components.

Symptoms of Exposure
No significant reaction of the human body to the product known.

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 (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. Incinerate in suitable incineration plant, observing local authority 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.

State regulations

<table>
<thead>
<tr>
<th>State RTK</th>
<th>CAS Number</th>
<th>Chemical name</th>
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<tbody>
<tr>
<td>NJ</td>
<td>65997-17-3</td>
<td>Glass, oxide, chemicals</td>
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<tr>
<td></td>
<td>1333-86-4</td>
<td>carbon black</td>
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<tr>
<td></td>
<td>14807-96-6</td>
<td>talc</td>
</tr>
<tr>
<td>PA</td>
<td>65997-17-3</td>
<td>Glass, oxide, chemicals</td>
</tr>
</tbody>
</table>

Safe Drinking Water & Toxic Enforcement Act, CA Prop. 65:

WARNING: This product can expose you to chemicals including GLASS WOOL FIBERS (INHALABLE AND BIOPERSISTENT), which is known to the State of California to cause cancer. For more information, go to www.P65Warnings.ca.gov.

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: 2018/12/18

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