1. Identification

Product identifier used on the label

ULTRASON® E 2020 P POLYARYLETHERSULFONE

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

Chemical family: polyether
Synonyms: Polyether sulfone

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.

Hazard not otherwise classified
No specific dangers known, if the regulations/notes for storage and handling are considered.

3. Composition / Information on Ingredients


Under the referenced regulation, this product does not contain any components classified for health hazards above the relevant cut off value.

4. First-Aid Measures

Description of first aid measures

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

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

If on skin:
Burns caused by molten material require hospital treatment.

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. 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, foam, dry powder
Special hazards arising from the substance or mixture

Hazards during fire-fighting:
carbon monoxide, Sulphur dioxide, can be emitted at > 400 °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.
Dust can form an explosive mixture with air.

6. Accidental release measures

Further accidental release measures:
High risk of slipping due to leakage/spillage of product. Dust can form an explosive mixture with air.

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
For small amounts: Pick up with suitable appliance and dispose of.
For large amounts: Pick up with suitable appliance and dispose of.
Reclaim for processing if possible.

7. Handling and Storage

Precautions for safe handling
Protection against fire and explosion:
Take precautionary measures against static discharges. Use antistatic tools. Avoid whirling up the material/product because of the danger of dust explosion. Accumulation of fine dust may entail the risk of a dust explosion in the presence of air. Containers should be earthed during decanting operations.

Conditions for safe storage, including any incompatibilities

Suitable materials for containers: Low density polyethylene (LDPE), High density polyethylene (HDPE), Aluminium, Carbon steel (Iron)

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
No occupational exposure limits known.

**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.

**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:**
After use of gloves apply skin-cleaning agents and skin cosmetics.

### 9. Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Form:</strong></td>
<td>powder, flocks</td>
</tr>
<tr>
<td><strong>Odour:</strong></td>
<td>odourless</td>
</tr>
<tr>
<td><strong>Odour threshold:</strong></td>
<td>not applicable</td>
</tr>
<tr>
<td><strong>Colour:</strong></td>
<td>white</td>
</tr>
<tr>
<td><strong>pH value:</strong></td>
<td>not applicable</td>
</tr>
<tr>
<td><strong>glass transition temperature:</strong></td>
<td>225 °C</td>
</tr>
<tr>
<td><strong>Boiling range:</strong></td>
<td>The substance / product</td>
</tr>
<tr>
<td><strong>Sublimation point:</strong></td>
<td>decomposes therefore not</td>
</tr>
<tr>
<td><strong>Flash point:</strong></td>
<td>not applicable</td>
</tr>
<tr>
<td><strong>Flammability:</strong></td>
<td>not self-igniting</td>
</tr>
<tr>
<td><strong>Flammability of Aerosol Products:</strong></td>
<td>not applicable, the product</td>
</tr>
<tr>
<td><strong>Lower explosion limit:</strong></td>
<td>not form flammable aerosoles</td>
</tr>
<tr>
<td><strong>Upper explosion limit:</strong></td>
<td>For solids not relevant for</td>
</tr>
<tr>
<td></td>
<td>classification and labelling.</td>
</tr>
<tr>
<td><strong>Autoignition:</strong></td>
<td>580 - 600 °C</td>
</tr>
<tr>
<td><strong>Vapour pressure:</strong></td>
<td>not applicable</td>
</tr>
<tr>
<td><strong>Density:</strong></td>
<td>1.30 - 1.40 g/cm³</td>
</tr>
<tr>
<td></td>
<td>(20 °C, 1,013 hPa)</td>
</tr>
<tr>
<td><strong>Relative density:</strong></td>
<td>Study does not need to be</td>
</tr>
<tr>
<td></td>
<td>conducted.</td>
</tr>
<tr>
<td><strong>Bulk density:</strong></td>
<td>250 - 350 kg/m³</td>
</tr>
<tr>
<td></td>
<td>(20 °C, 1,013 hPa)</td>
</tr>
<tr>
<td><strong>Vapour density:</strong></td>
<td>not applicable</td>
</tr>
<tr>
<td><strong>Partitioning coefficient n-octanol/water (log Pow):</strong></td>
<td>not applicable</td>
</tr>
<tr>
<td><strong>Self-ignition temperature:</strong></td>
<td>not self-igniting</td>
</tr>
</tbody>
</table>

*(DIN 54836)*

*(EN ISO 1183-1)*
10. Stability and Reactivity

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

Oxidizing properties:
not fire-propagating

Minimum ignition energy:
The product is capable of dust explosion.

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: > 400 degrees Celsius

Incompatible materials
No substances known that should be avoided.

Hazardous decomposition products
Decomposition products:
Hazardous decomposition products: carbon monoxide, carbon dioxide, sulphur trioxide, Water, Benzenesulfonic acid, 2(or 4)-methyl-, phenol, Sulphur dioxide, Gaseous products of degradation can be given off if the product is greatly overheated.

Thermal decomposition:
> 400 °C
Thermal decomposition above the indicated temperature is possible.

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**
Type of value: ATE  
Value: > 5,000 mg/l  
Determined for dust

**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.

**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**

**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.

**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 (H2O)
Experience shows this product to be inert and non-degradable.

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.

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.

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

WARNING: This product can expose you to chemicals including N-METHYLPYRROLIDONE, which is known to the State of California to cause birth defects or other reproductive harm. For more information, go to www.P65Warnings.ca.gov.
Safety Data Sheet

ULTRASON® E 2020 P POLYARYLETHERSULFONE

Revision date: 2018/05/22
Version: 4.0

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: 2018/05/22

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