1. Identification

Product identifier used on the label

ULTRAFORM® N2320 003 UNCOLORED Q600 POLYACETAL

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: polyoxymethylene copolymerizate (POM)
Synonyms: POLYOXYMETHYLENE COPOLYMER
ULTRAFORM

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.

Hazards not otherwise classified

Labeling of special preparations (GHS):
May cause cancer. Contains formaldehyde. MAY EMIT FORMALDEHYDE WHICH CAN CAUSE CANCER. HEATING DURING PROCESSING OF PRODUCT MAY RESULT IN RELEASE OF THE DECOMPOSITION PRODUCT FORMALDEHYDE. UNDER HOT MELT PROCESSING CONDITIONS, WEAR PERSONAL PROTECTIVE EQUIPMENT TO PREVENT THERMAL BURNS.

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:
Remove contaminated clothing.

If inhaled:
If formaldehyde vapour is inhaled, remove person to fresh air and keep warm, if necessary summon physician. Inhale corticosteroid dose aerosol.

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

**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**

Use personal protective clothing.

**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**

For small amounts: Sweep/shovel up.  
For large amounts: Sweep/shovel up.

7. Handling and Storage

**Precautions for safe handling**

Provide suitable exhaust ventilation at the processing machines. Avoid inhalation of dusts/mists/vapours.

Protection against fire and explosion:  
Containers should be grounded against electrostatic charge.

**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), High density polyethylene (HDPE), Carbon steel (Iron)

Further information on storage conditions: Keep container tightly closed. Avoid deposition of dust.
8. Exposure Controls/Personal Protection

No occupational exposure limits known.

**Advice on system design:**
Provide exhaust ventilation at sources when processing molten product.

**Personal protective equipment**

**Respiratory protection:**
Wear a NIOSH-certified organic vapour cartridge respirator when handling molten materials. Do not exceed the maximum use concentration for the respirator facepiece/cartridge combination.

**Hand protection:**
Chemical resistant protective gloves. Wear gloves to prevent contact during mechanical processing and/or hot melt conditions.

**Eye protection:**
Safety glasses with side-shields.

**Body protection:**
Body protection must be chosen based on level of activity and exposure.

**General safety and hygiene measures:**
Avoid inhalation of vapour. Wash soiled clothing immediately.

9. Physical and Chemical Properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form</td>
<td>pellets</td>
</tr>
<tr>
<td>Odour</td>
<td>product specific</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>No applicable information available.</td>
</tr>
<tr>
<td>Colour</td>
<td>various, depending on the colourant</td>
</tr>
<tr>
<td>pH value</td>
<td>not applicable</td>
</tr>
<tr>
<td>melting range</td>
<td>160 - 175 °C</td>
</tr>
<tr>
<td>Boiling range</td>
<td>The substance / product decomposes therefore not determined.</td>
</tr>
<tr>
<td>Sublimation point</td>
<td>No applicable information available.</td>
</tr>
<tr>
<td>Flash point</td>
<td>320 - 340 °C</td>
</tr>
<tr>
<td>Flammability</td>
<td>not self-igniting</td>
</tr>
<tr>
<td>Flammability of Aerosol Products</td>
<td>not applicable, the product does not form flammable aerosoles</td>
</tr>
<tr>
<td>Lower explosion limit</td>
<td>For solids not relevant for classification and labelling.</td>
</tr>
<tr>
<td>Upper explosion limit</td>
<td>For solids not relevant for classification and labelling.</td>
</tr>
<tr>
<td>Autoignition</td>
<td>320 - 340 °C</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>not applicable</td>
</tr>
<tr>
<td>Density</td>
<td>1.4 g/cm³ (20 °C)</td>
</tr>
<tr>
<td>Relative density</td>
<td>Study does not need to be conducted.</td>
</tr>
<tr>
<td>Bulk density</td>
<td>850 kg/m³</td>
</tr>
<tr>
<td>Vapour density</td>
<td>not applicable</td>
</tr>
<tr>
<td>Partitioning coefficient n-octanol/water (log Pow):</td>
<td>not applicable</td>
</tr>
</tbody>
</table>
10. Stability and Reactivity

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

**Corrosion to metals:**
No corrosive effect on metal.

**Oxidizing properties:**
not fire-propagating

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

**Possibility of hazardous reactions**
Do not process with PVC or other plastics containing halogenated flame retardants.

**Conditions to avoid**
Temperature: > 240 degrees Celsius

**Incompatible materials**
inorganic acids, organic acids

**Hazardous decomposition products**

Decomposition products:
Possible decomposition products: carbon monoxide, Formaldehyde, carbon dioxide, Water

**Thermal decomposition:**
> 240 °C
To avoid thermal decomposition, do not overheat. May decompose violently. Gaseous products of degradation can be given off if the product is greatly overheated.

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.

Information on: Formaldehyde

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

Inhalation
The inhalation of fumes represents a severe acute hazard. Irritating to respiratory system.

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

Assessment other acute effects
Assessment of STOT single:
Causes temporary irritation of the respiratory tract.

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

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

Information on: Formaldehyde
Assessment of irritating effects: Corrosive! Damages skin and eyes. Depending on the concentration and duration of exposure, aqueous solutions can cause a strongly irritating or corrosive effect on the skin or eyes.

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

Information on: Formaldehyde
Assessment of carcinogenicity: NTP listed carcinogen The International Agency for Research on Cancer (IARC) has classified formaldehyde as a Group 1 (known) human carcinogen based on
epidemiological evidence linking formaldehyde exposure to occurrence of nasopharyngeal cancer and leukemia. Current regulatory information is provided in this MSDS. No adverse health effects are anticipated if recommended personal protective equipment and industrial hygiene practices are used.

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
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.

Medical conditions aggravated by overexposure
The use of products that contain or liberate formaldehyde is regulated under the OSHA Formaldehyde Standard (see 29 CFR 1910.1048).

12. Ecological Information

Toxicity

Aquatic toxicity
Assessment of aquatic toxicity:
There is a high probability that the product is not acutely harmful to aquatic organisms. The inhibition of the degradation activity of activated sludge is not anticipated when introduced to biological treatment plants in appropriate low concentrations.

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.

**NFPA Hazard codes:**
Health: 2  Fire: 1  Reactivity: 0  Special:

**HMIS III rating**
Health: 2  Flammability: 1  Physical hazard: 0

16. Other Information

**SDS Prepared by:**
BASF NA Product Regulations
SDS Prepared on: 2018/10/31

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