1. Identification

Product identifier used on the label

ULTRAFORM® N2640 Z4 BLACK 140 Q600 POLYACETAL

Recommended use of the chemical and restriction on use

Recommended use*: Polymer
Recommended use*: Polymer; for industrial processing only
Suitable for use in industrial sector: Polymers industry
Unsuitable for use: Uses other than recommended

* 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

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

Other means of identification
Substance number: 152864
Chemical family: polyoxymethylene copolymerizate (POM)
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

Labeling of special preparations (GHS):
This product is capable of releasing formaldehyde into the air. 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.

The product contains:

<table>
<thead>
<tr>
<th>CAS Number</th>
<th>Weight %</th>
<th>Chemical name</th>
</tr>
</thead>
</table>
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: (Further) symptoms and / or effects are not known so far
No data available.
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 according to symptoms (decontamination, vital functions), no known specific antidote.
5. Fire-Fighting Measures

Extinguishing media

Suitable extinguishing media:
water spray, foam, dry powder

Unsuitable extinguishing media for safety reasons:
water jet

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
Wear suitable personal protective clothing and equipment.

Environmental precautions
No special precautions necessary. 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)

8. Exposure Controls/Personal Protection

No substance specific 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>black</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>Freezing point</td>
<td>No data available</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>
</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.

The product is chemically stable.

**Possibility of hazardous reactions**

Do not process with PVC or other plastics containing halogenated flame retardants. If processing with color masterbatches or functional batches is intended, the compatibility of the components must be established by suitable trials. Processing with incompatible masterbatches may result in decomposition and release of gaseous formaldehyde.

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<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>
<tr>
<td>Self-ignition temperature:</td>
<td>Not self-igniting</td>
</tr>
<tr>
<td>Thermal decomposition:</td>
<td>&gt; 240 °C</td>
</tr>
<tr>
<td></td>
<td>To avoid thermal decomposition, do not overheat. May decompose violently. Gaseous products of degradation can be given off if the product is greatly overheated.</td>
</tr>
<tr>
<td>Viscosity, dynamic:</td>
<td>Not applicable, the product is a solid</td>
</tr>
<tr>
<td>Viscosity, kinematic:</td>
<td>Not applicable, the product is a solid</td>
</tr>
<tr>
<td>Solubility in water:</td>
<td>Insoluble</td>
</tr>
<tr>
<td>Solubility (quantitative):</td>
<td>No applicable information available.</td>
</tr>
<tr>
<td>Solubility (qualitative):</td>
<td>No applicable information available.</td>
</tr>
<tr>
<td>Molar mass:</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Evaporation rate:</td>
<td>The product is a non-volatile solid</td>
</tr>
</tbody>
</table>
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
OSHA (Occupational Safety and Health Administration) has classified this substance as acute toxic.

Oral
Type of value: ATE
Value: > 5,000 mg/kg
The product has not been tested. The statement has been derived from the properties of the individual components.

**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.
OSHA (Occupational Safety and Health Administration) has classified this substance as irritating/corrosive to the skin, eyes, and airways.

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**Sensitization**
*Information on: Formaldehyde*
Assessment of sensitization:
Caused skin sensitization in animal studies. Caused sensitization in humans.
OSHA (Occupational Safety and Health Administration) has classified this substance as a skin sensitizer. OSHA (Occupational Safety and Health Administration) has classified this substance as a respiratory sensitizer.
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.

*Information on: Formaldehyde
Assessment of repeated dose toxicity: After repeated exposure the prominent effect is local irritation.*

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: 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 SDS. No adverse health effects are anticipated if recommended personal protective equipment and industrial hygiene practices are used. OSHA (Occupational Safety and Health Administration) has classified this substance as carcinogenic.*

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.

### 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.

**Mobility in soil**

Assessment transport between environmental compartments
Study scientifically not justified.
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>
</tr>
</thead>
<tbody>
<tr>
<td>PA</td>
<td>50-00-0</td>
<td>Formaldehyde</td>
</tr>
<tr>
<td></td>
<td>1333-86-4</td>
<td>carbon black</td>
</tr>
</tbody>
</table>

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

WARNING: This product can expose you to chemicals including LEAD, which is known to the State of California to cause cancer and birth defects or other reproductive harm. For more information, go to www.P65Warnings.ca.gov.

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: 2020/08/27

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END OF DATA SHEET