

Safety Data Sheet

ULTRAFORM® N2640 Z4 UNCOLORED Q600 POLYACETAL

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(30192055/SDS_GEN_US/EN)

1. Identification

Product identifier used on the label

ULTRAFORM® N2640 Z4 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

Synonyms: POLYOXYMETHYLENE COPOLYMER

2. Hazards Identification

According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

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.

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Hazards not otherwise classified

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

Labeling of special preparations (GHS):

HEATING DURING PROCESSING OF PRODUCT MAY RESULT IN RELEASE OF THE DECOMPOSITION PRODUCT FORMALDEHYDE. MAY EMIT FORMALDEHYDE WHICH CAN CAUSE CANCER.

3. Composition / Information on Ingredients

According to Regulation 2012 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

This product does not contain any components classified as hazardous under the referenced regulation.

According to Regulation 1994 OSHA Hazard Communication Standard; 29 CFR Part 1910.1200

| <u>CAS Number</u> | <u>Content (W/W)</u> | <u>Chemical name</u> |
|-------------------|----------------------|--|
| 24969-26-4 | > 70.0 - < 90.0 % | polyoxymethylene copolymerizate (POM) |
| 26375-23-5 | > 10.0 - < 30.0 % | Hexanedioic acid, polymer with 1,4-butanediol and 1,1'-methylenebis[4-isocyanatobenzene] |

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:

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.

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

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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:
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

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

Processing machines must be fitted with local exhaust ventilation. 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

Suitable materials for containers: Low density polyethylene (LDPE), High density polyethylene (HDPE), Stainless steel

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Further information on storage conditions: Avoid extreme heat. Avoid deposition of dust.

Storage stability:
Protect against moisture.

8. Exposure Controls/Personal Protection

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:

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:

Avoid inhalation of vapour. After use of gloves apply skin-cleaning agents and skin cosmetics.

9. Physical and Chemical Properties

| | | |
|---|-----------------------------|--|
| Form: | granules | |
| Odour: | product specific | |
| Odour threshold: | | not applicable |
| Colour: | various, depending on | the colourant |
| pH value: | | not applicable |
| melting range: | 160 - 175 °C | (DIN EN ISO 3146) |
| Boiling range: | | The substance / product decomposes therefore not determined. |
| Flash point: | 320 - 340 °C | |
| Flammability: | not self-igniting | |
| Flammability of Aerosol Products: | | not applicable, the product does not form flammable aerosoles) |
| Lower explosion limit: | | For solids not relevant for classification and labelling. |
| Upper explosion limit: | | For solids not relevant for classification and labelling. |
| Autoignition: | 320 - 340 °C | (ASTM D1929) |
| Vapour pressure: | | not applicable |
| Density: | 1.4 - 1.7 g/cm ³ | (20 °C) (DIN 53479) |
| Relative density: | | No data available. |
| Bulk density: | 850 kg/m ³ | |
| Vapour density: | | not applicable |
| Partitioning coefficient n-octanol/water (log Pow): | | not applicable |

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| | | |
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| Self-ignition temperature: | | not self-igniting |
| 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. |
| Viscosity, dynamic: | | not applicable, the product is a solid |
| Viscosity, kinematic: | | not applicable, the product is a solid |
| Particle size: | 10 µm | (measured) |
| Solubility in water: | | insoluble |
| Evaporation rate: | | The product is a non-volatile solid. |

10. Stability and Reactivity

Reactivity

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

Corrosion to metals:

No corrosive effect on metal.

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.

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Information on: Formaldehyde

Assessment of acute toxicity: Of high toxicity after short-term inhalation. Of high toxicity after short-term skin contact. Of high toxicity after single ingestion.

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

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.

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.

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

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

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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 MSDS. No adverse health effects are anticipated if recommended personal protective equipment and industrial hygiene practices are used.

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.

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)

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

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.

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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;

NFPA Hazard codes:

Health : 2 Fire: 1 Reactivity: 0 Special:

16. Other Information

SDS Prepared by:

BASF NA Product Regulations

SDS Prepared on: 2015/04/16

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