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1. Identification

Product identifier used on the label

THERMOTEK X99 SILICONE (N)

Recommended use of the chemical and restriction on use

Recommended use*: Use in Coatings

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: organic compounds

2. Hazards Identification

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

Classification of the product

Skin Sens.

1 Skin sensitization

Muta.

1B Germ cell mutagenicity

Carc.

1B Carcinogenicity

STOT RE 1 (by inhalation) Specific target organ toxicity — repeated

exposure

Aquatic Acute 3 Hazardous to the aquatic environment - acute Aquatic Chronic 3 Hazardous to the aquatic environment - chronic

Label elements

^{*} 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.

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Pictogram:



Signal Word: Danger

Hazard Statement:

H317 May cause an allergic skin reaction.

H350 May cause cancer.

H340 May cause genetic defects.

H372 Causes damage to organs (Lung) through prolonged or repeated

exposure (inhalation).

H402 Harmful to aquatic life.

H412 Harmful to aquatic life with long lasting effects.

Precautionary Statements (Prevention):

P280 Wear protective gloves/protective clothing/eye protection/face

protection.

P201 Obtain special instructions before use. P260 Do not breathe dust/gas/mist/vapours.

P202 Do not handle until all safety precautions have been read and

understood.

P273 Avoid release to the environment.

P270 Do not eat, drink or smoke when using this product.

P264 Wash with plenty of water and soap thoroughly after handling.

P272 Contaminated work clothing should not be allowed out of the workplace.

Precautionary Statements (Response):

P314 Get medical advice/attention if you feel unwell.

P308 + P311 IF exposed or concerned: Call a POISON CENTER or doctor/physician.

P303 + P352 IF ON SKIN (or hair): Wash with plenty of soap and water. Take off contaminated clothing and wash it before reuse.

Precautionary Statements (Storage): P405 Store locked up.

Precautionary Statements (Disposal):

P501 Dispose of contents/container to hazardous or special waste collection

point.

Hazards not otherwise classified

No applicable information available.

Labeling of special preparations (GHS):

Product contains the following components and may cause an allergic skin reaction: 1,2-

Ethanediamine, N-[3-(trimethoxysilyl)propyl]-

3. Composition / Information on Ingredients

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

CAS Number Weight % Chemical name

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14808-60-7 >= 15.0 - < 20.0% Quartz (SiO2) 13463-67-7 >= 7.0 - < 10.0% Titanium dioxide

64742-48-9 >= 0.3 - < 1.0% Naphtha (petroleum), hydrotreated heavy 1760-24-3 >= 0.0 - < 1.0% 1,2-Ethanediamine, N-[3-(trimethoxysilyl)propyl]-

4. First-Aid Measures

Description of first aid measures

General advice:

Remove contaminated clothing.

If inhaled:

Keep patient calm, remove to fresh air.

If on skin:

Wash thoroughly with soap and water.

If in eyes:

Wash affected eyes for at least 15 minutes under running water with eyelids held open.

If swallowed:

Rinse mouth and then drink plenty of water.

Most important symptoms and effects, both acute and delayed

Symptoms: The most important known symptoms and effects are described in the labelling (see

section 2) and/or in section 11.

Hazards: No applicable information available.

Indication of any immediate medical attention and special treatment needed

Note to physician

Treatment: Symptomatic treatment (decontamination, vital functions).

5. Fire-Fighting Measures

Extinguishing media

Suitable extinguishing media:

foam, water spray, dry powder, carbon dioxide

Unsuitable extinguishing media for safety reasons:

water jet

Special hazards arising from the substance or mixture

Hazards during fire-fighting:

carbon dioxide, carbon monoxide, harmful vapours, nitrogen oxides, fumes/smoke, carbon black

Advice for fire-fighters

Protective equipment for fire-fighting:

Wear a self-contained breathing apparatus.

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Further information:

The degree of risk is governed by the burning substance and the fire conditions. Contaminated extinguishing water must be disposed of in accordance with official regulations.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Use personal protective clothing. Handle in accordance with good building materials hygiene and safety practice.

Environmental precautions

Contain contaminated water/firefighting water. Do not discharge into drains/surface waters/groundwater.

Methods and material for containment and cleaning up

For small amounts: Sweep/shovel up. Dispose of absorbed material in accordance with regulations. For large amounts: Sweep/shovel up. Dispose of absorbed material in accordance with regulations.

7. Handling and Storage

Precautions for safe handling

Avoid contact with the skin, eyes and clothing.

Protection against fire and explosion:

Keep away from sources of ignition - No smoking. The relevant fire protection measures should be noted.

Conditions for safe storage, including any incompatibilities

No applicable information available.

Further information on storage conditions: Keep only in the original container in a cool, well-ventilated place. Protect from direct sunlight. Store protected against freezing.

8. Exposure Controls/Personal Protection

Components with occupational exposure limits

Titanium dioxide OSHA PEL PEL 15 mg/m3 Total dust ; TWA value 10

mg/m3 Total dust;

ACGIH TLV TWA value 10 mg/m3;

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Quartz (SiO2) OSHA PEL TWA value 0.1 mg/m3 Respirable dust ; TWA

value 0.1 mg/m3 Respirable;

The exposure limit is calculated from the

equation, 10mg/m3)/(%SiO2+2), using a value of 100% SiO2. Lower percentages of SiO2 will yield

higher exposure limits.

TWA value 2.4 millions of particles per cubic foot

of air Respirable:

The exposure limit is calculated from the

equation, 250/(%SiO2+5), using a value of 100% SiO2. Lower percentages of SiO2 will yield higher

exposure limits.

ACGIH TLV TWA value 0.025 mg/m3 Respirable fraction;

Quartz (SiO2) OSHA PEL TWA value 0.1 mg/m3 Respirable dust ; TWA

value 0.1 mg/m3 Respirable;

The exposure limit is calculated from the

equation, 10mg/m3)/(%SiO2+2), using a value of 100% SiO2. Lower percentages of SiO2 will yield

higher exposure limits.

TWA value 2.4 millions of particles per cubic foot

of air Respirable;

The exposure limit is calculated from the

equation, 250/(%SiO2+5), using a value of 100% SiO2. Lower percentages of SiO2 will yield higher

exposure limits.

ACGIH TLV TWA value 0.025 mg/m3 Respirable fraction;

Advice on system design:

No applicable information available.

Personal protective equipment

Respiratory protection:

Wear appropriate certified respirator when exposure limits may be exceeded.

Hand protection:

Chemical resistant protective gloves

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 contact with the skin, eyes and clothing. No special measures necessary if stored and handled correctly. Handle in accordance with good building materials hygiene and safety practice. Wearing of closed work clothing is recommended. When using, do not eat, drink or smoke. Hands and/or face should be washed before breaks and at the end of the shift. At the end of the shift the skin should be cleaned and skin-care agents applied. Gloves must be inspected regularly and prior to each use. Replace if necessary (e.g. pinhole leaks).

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9. Physical and Chemical Properties

Form: dispersion

Odour: of the solvent contained in the product Odour threshold: No applicable information available.

Colour: white

pH value: No applicable information available. Melting point: No applicable information available. No applicable information available. Boiling point: Sublimation point: No applicable information available. Flash point: No applicable information available. Flammability: No applicable information available. Lower explosion limit: No applicable information available. Upper explosion limit: No applicable information available. Autoignition: No applicable information available.

Density: 1.34 - 1.38 g/cm3 (approx. 20 °C)

Relative density:

Vapour density:

No applicable information available.

No applicable information available.

No applicable information available.

octanol/water (log Pow):

Thermal decomposition:
Viscosity, dynamic:
Viscosity, kinematic:

No applicable information available.
No applicable information available.

Solubility in water: immiscible

Solubility (quantitative): No applicable information available. Solubility (qualitative): No applicable information available. Evaporation rate: No applicable information available.

Other Information: If necessary, information on other physical and chemical

parameters is indicated in this section.

10. Stability and Reactivity

Reactivity

No applicable information available.

Chemical stability

No applicable information available.

Possibility of hazardous reactions

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

Conditions to avoid

See MSDS section 7 - Handling and storage.

Incompatible materials

strong acids, strong bases, strong oxidizing agents, strong reducing agents

Hazardous decomposition products

Decomposition products:

No hazardous decomposition products if stored and handled as prescribed/indicated.

Thermal decomposition:

No applicable information available.

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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: Virtually nontoxic after a single ingestion. Based on available Data, the classification criteria are not met.

Assessment other acute effects

Based on available Data, the classification criteria are not met.

Irritation / corrosion

Assessment of irritating effects: No irritation is expected under intended use and appropriate handling. Based on available Data, the classification criteria are not met.

Sensitization

Assessment of sensitization: May cause sensitization by skin contact.

Aspiration Hazard

No aspiration hazard expected.

Chronic Toxicity/Effects

Repeated dose toxicity

Assessment of repeated dose toxicity: This product contains crystalline silica (quartz). Prolonged or repeated inhalation of respirable crystalline silica may result in silicosis.

Genetic toxicity

Assessment of mutagenicity: Capable of causing genetic defects.

Carcinogenicity

Assessment of carcinogenicity: May cause cancer.

Information on: Quartz (SiO2)

Assessment of carcinogenicity: In long-term studies in rats and mice in which the substance was given by feed, a carcinogenic effect was not observed. In long-term animal studies in which the substance was given by inhalation in high doses, a carcinogenic effect was observed. The substance and its compounds in the form of respirable dusts/aerosolsis classified by the German MAK commision as a category 1 carcinogen (substances that cause cancer to humans). A carcinogenic effect cannot safely be ruled out. The inhalation uptake of the alveolar fraction of the fine dust may cause damage to the lungs. The International Agency for Research on Cancer (IARC) has classified this substance as a Group 1 (known) human carcinogen.

NTP listed carcinogen

Information on: Titanium dioxide

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 studies in rats in which the substance was given by inhalation, a carcinogenic effect was observed. Tumors were only observed in rats after chronic inhalative exposure to high concentrations which caused sustained lung inflammation. In long-term studies in rats and mice in which the substance was given by feed, a carcinogenic effect was not observed. Dermal exposure is not expected to be carcinogenic.

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Reproductive toxicity

Assessment of reproduction toxicity: The chemical structure does not suggest a specific alert for such an effect. Based on available Data, the classification criteria are not met.

Teratogenicity

Assessment of teratogenicity: The chemical structure does not suggest a specific alert for such an effect. Based on available Data, the classification criteria are not met.

Other Information

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

Symptoms of Exposure

The most important known symptoms and effects are described in the labelling (see section 2) and/or in section 11.

12. Ecological Information

Toxicity

Aquatic toxicity

Assessment of aquatic toxicity:

Acutely harmful for aquatic organisms. May cause long-term adverse effects in the aquatic environment.

Persistence and degradability

Assessment biodegradation and elimination (H2O)

Inherently biodegradable. The insoluble fraction can be removed by mechanical means in suitable waste water treatment plants.

The polymer component of the product is poorly biodegradable.

Bioaccumulative potential

Assessment bioaccumulation potential

Discharge into the environment must be avoided.

Mobility in soil

Assessment transport between environmental compartments

No data available.

Additional information

Other ecotoxicological advice:

Do not discharge product into the environment without control. The product has not been tested. The statements on ecotoxicology have been derived from the properties of the individual components.

13. Disposal considerations

Waste disposal of substance:

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Dispose of in accordance with local authority regulations. Do not discharge into drains/surface waters/groundwater.

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.

CERCLA RQ	CAS Number	Chemical name
5000 LBS	67-56-1	Methanol

State regulations

State RTK	CAS Number	Chemical name
NJ	13463-67-7	Titanium dioxide
	14808-60-7	Quartz (SiO2)
PA	13463-67-7	Titanium dioxide
	14808-60-7	Quartz (SiO2)
	14808-60-7	Quartz (SiO2)

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

WARNING: This product can expose you to chemicals including SILICA, CRYSTALLINE (AIRBORNE PARTICLES OF RESPIRABLE SIZE), which is known to the State of California to cause cancer, and METHANOL, 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.

NFPA Hazard codes:

Health: 2 Fire: 0 Reactivity: 0 Special:

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16. Other Information

SDS Prepared by:

BASF NA Product Regulations SDS Prepared on: 2018/07/24

We support worldwide Responsible Care® initiatives. We value the health and safety of our employees, customers, suppliers and neighbors, and the protection of the environment. Our commitment to Responsible Care is integral to conducting our business and operating our facilities in a safe and environmentally responsible fashion, supporting our customers and suppliers in ensuring the safe and environmentally sound handling of our products, and minimizing the impact of our operations on society and the environment during production, storage, transport, use and disposal of our products.

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