

Safety Data Sheet

SKYTITE® C3-2.8 R RESIN

Revision date : 2020/01/10
Version: 5.0

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1. Identification

Product identifier used on the label

SKYTITE® C3-2.8 R RESIN

Recommended use of the chemical and restriction on use

Recommended use*: polyurethane component; industrial chemicals
Suitable for use in industrial sector: Polymers industry; chemical 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: resin
Synonyms: Urethane System Resin Component

2. Hazards Identification

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

Classification of the product

| | | |
|-------------------|----------|--|
| Skin Corr./Irrit. | 2 | Skin corrosion/irritation |
| Eye Dam./Irrit. | 2A | Serious eye damage/eye irritation |
| STOT RE | 2 (oral) | Specific target organ toxicity — repeated exposure |
| Aquatic Acute | 3 | Hazardous to the aquatic environment - acute |
| Aquatic Chronic | 3 | Hazardous to the aquatic environment - chronic |
| Skin Sens. | 1 | Skin sensitization |

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Label elements

Pictogram:



Signal Word:
Warning

Hazard Statement:

| | |
|------|--|
| H319 | Causes serious eye irritation. |
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |
| H373 | May cause damage to organs (Kidney) through prolonged or repeated exposure (oral). |
| H402 | Harmful to aquatic life. |
| H412 | Harmful to aquatic life with long lasting effects. |

Precautionary Statements (Prevention):

| | |
|------|--|
| P280 | Wear protective gloves. |
| P260 | Do not breathe dust/gas/mist/vapours. |
| P280 | Wear eye protection. |
| P273 | Avoid release to the environment. |
| P272 | Contaminated work clothing should not be allowed out of the workplace. |
| P264 | Wash contaminated body parts thoroughly after handling. |

Precautionary Statements (Response):

| | |
|--------------------|--|
| P305 + P351 + P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P314 | Get medical advice/attention if you feel unwell. |
| P303 + P362 | IF ON SKIN (or hair): Wash with plenty of soap and water. |
| P333 + P311 | If skin irritation or rash occurs: Call a POISON CENTER or doctor/physician. |
| P332 + P313 | If skin irritation occurs: Get medical advice/attention. |
| P362 + P364 | Take off contaminated clothing and wash it before reuse. |
| P337 + P311 | If eye irritation persists: Call a POISON CENTER or doctor/physician. |

Precautionary Statements (Disposal):

| | |
|------|---|
| P501 | Dispose of contents and container to hazardous or special waste collection point. |
|------|---|

Hazards not otherwise classified

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

3. Composition / Information on Ingredients

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

Triethyl phosphate

CAS Number: 78-40-0

Content (W/W): >= 1.0 - < 7.0%

Synonym: Phosphoric acid triethyl ester; Triethyl phosphate

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cyclohexyldimethylamine
CAS Number: 98-94-2
Content (W/W): ≥ 0.1 - $< 5.0\%$
Synonym: N,N-Dimethyl cyclohexanamine; Cyclohexyldimethylamine

diethylene glycol
CAS Number: 111-46-6
Content (W/W): ≥ 1.0 - $< 10.0\%$
Synonym: Diethylene glycol

tris(2-chloro-1-methylethyl)phosphate
CAS Number: 13674-84-5
Content (W/W): ≥ 3.0 - $< 10.0\%$
Synonym: 1-Chloro-2-propanol phosphate (3:1); Tris (2-chloro-1-methylethyl)phosphate

4-Nonylphenol, branched, ethoxylated
CAS Number: 127087-87-0
Content (W/W): ≥ 0.0 - $< 12.0\%$
Synonym: 4-Nonylphenol, branched, ethoxylated

1-Propene, 1-chloro-3,3,3-trifluoro-, (1E)-
CAS Number: 102687-65-0
Content (W/W): ≥ 5.0 - $< 15.0\%$
Synonym: No data available.

4. First-Aid Measures

Description of first aid measures

General advice:

Remove contaminated clothing.

If inhaled:

Keep patient calm, remove to fresh air, seek medical attention.

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, consult an eye specialist.

If swallowed:

Immediately rinse mouth and then drink 200-300 ml of water, seek medical attention. Do not induce vomiting.

Most important symptoms and effects, both acute and delayed

Symptoms: Information, i.e. additional information on symptoms and effects may be included in the GHS labeling phrases available in Section 2 and in the Toxicological assessments available in Section 11.

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Information on: diethylene glycol

Symptoms: Overexposure may cause: vomiting, coma, abdominal cramps, lethargy, nausea, diarrhea, headache

Information on: tris(2-chloro-1-methylethyl)phosphate

Symptoms: Overexposure may cause: convulsions, depression, hypoxemia, tremors

Hazards: No hazards anticipated.

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, dry powder, carbon dioxide, foam

Special hazards arising from the substance or mixture

Hazards during fire-fighting:
No particular hazards known.

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

Do not empty into drains. Do not discharge into the subsoil/soil.

Methods and material for containment and cleaning up

Spills should be contained, solidified, and placed in suitable containers for disposal.

7. Handling and Storage

Precautions for safe handling

Ensure thorough ventilation of stores and work areas. Protect against moisture.

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Protection against fire and explosion:
No special precautions necessary.

Conditions for safe storage, including any incompatibilities

Segregate from foods and animal feeds. Segregate from acids. Segregate from oxidants.

Suitable materials for containers: Carbon steel (Iron), High density polyethylene (HDPE), Low density polyethylene (LDPE), Stainless steel 1.4301 (V2)

Further information on storage conditions: Containers should be stored tightly sealed in a dry place.

Storage stability:

Storage temperature: 16 - 27 °C

Protect against moisture.

The stated storage temperature is noted for health and safety in the workplace. With regard to Quality, please refer to the product specific Technical Bulletin.

8. Exposure Controls/Personal Protection

Advice on system design:

Provide local exhaust ventilation to control vapours/mists.

Personal protective equipment

Respiratory protection:

Wear a NIOSH-certified (or equivalent) organic vapour/particulate respirator as needed.

Hand protection:

Chemical resistant protective gloves

Eye protection:

Wear face shield or tightly fitting safety goggles (chemical goggles) if splashing hazard exists.

Body protection:

Standard work clothes and shoes.

General safety and hygiene measures:

Avoid contact with skin. Handle in accordance with good industrial hygiene and safety practice. Wear protective clothing as necessary to prevent contact. Avoid inhalation of vapours/mists. Wash soiled clothing immediately.

9. Physical and Chemical Properties

| | | |
|--------------------|--------------------------------------|----------------------------|
| Form: | liquid | |
| Odour: | amine-like | |
| Odour threshold: | No applicable information available. | |
| Colour: | amber | |
| pH value: | >= 7.0 | |
| Freezing point: | > 0.00 °C | |
| Boiling point: | > 100.00 °C | |
| Sublimation point: | No applicable information available. | |
| Flash point: | > 200.00 °F | (closed cup) |
| Flammability: | not flammable | (derived from flash point) |

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| | |
|---|--|
| Lower explosion limit: | For liquids not relevant for classification and labelling. The lower explosion point may be 5 - 15 °C below the flash point. |
| Upper explosion limit: | For liquids not relevant for classification and labelling. |
| Autoignition: | Unspecified |
| Vapour pressure: | < 0.1 hPa (25 °C) |
| Density: | 1.1800 g/cm ³ (20.00 °C) |
| Relative density: | No applicable information available. |
| Vapour density: | No applicable information available. |
| Partitioning coefficient n-octanol/water (log Pow): | Unspecified |
| Self-ignition temperature: | not self-igniting |
| Thermal decomposition: | No decomposition if stored and handled as prescribed/indicated. |
| Viscosity, dynamic: | 400.000 mPa.s (22.00 °C) |
| Viscosity, kinematic: | No applicable information available. |
| Solubility in water: | slightly soluble |
| Solubility (quantitative): | No applicable information available. |
| Solubility (qualitative): | No applicable information available. |
| Evaporation rate: | Value can be approximated from Henry's Law Constant or vapor pressure. |
| Other Information: | If necessary, information on other physical and chemical parameters is indicated in this section. |

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 an oxidizer.

Chemical stability

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

Possibility of hazardous reactions

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

Conditions to avoid

Temperature: < 0 degrees Celsius

Incompatible materials

acids, oxidizing agents, isocyanates

Hazardous decomposition products

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Decomposition products:

Hazardous decomposition products: carbon monoxide, carbon dioxide, nitrogen oxide, hydrogen cyanide

Thermal decomposition:

No decomposition if stored and handled as prescribed/indicated.

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

Oral

Type of value: ATE

Value: 3,782 mg/kg

Inhalation

No applicable information available.

Dermal

No applicable information available.

Assessment other acute effects

Assessment of STOT single:

Based on the available information there is no specific target organ toxicity to be expected after a single exposure.

Origin of data: expert judgement

Irritation / corrosion

Assessment of irritating effects: Eye contact causes irritation. Skin contact causes irritation.

Sensitization

Assessment of sensitization: Sensitization after skin contact possible.

Aspiration Hazard

No aspiration hazard expected.

Chronic Toxicity/Effects

Repeated dose toxicity

Assessment of repeated dose toxicity: Repeated exposure may affect certain organs.

Genetic toxicity

Assessment of mutagenicity: The chemical structure does not suggest a specific alert for such an effect. No applicable information available.

Carcinogenicity

Assessment of carcinogenicity: The chemical structure does not suggest a specific alert for such an effect. No applicable information available.

Reproductive toxicity

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Assessment of reproduction toxicity: The chemical structure does not suggest a specific alert for such an effect. No applicable information available.

Teratogenicity

Assessment of teratogenicity: The chemical structure does not suggest a specific alert for such an effect. No applicable information available.

Other Information

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

Medical conditions aggravated by overexposure

Data available do not indicate that there are medical conditions that are generally recognized as being aggravated by exposure to this substance/product.

12. Ecological Information

Toxicity

Aquatic toxicity

Assessment of aquatic toxicity:

The product has not been tested. The statement has been derived from the properties of the individual components. Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Acutely harmful for aquatic organisms.

Toxicity to fish

Information on: tris(2-chloro-1-methylethyl)phosphate

LC50 (96 h) 51 mg/l, Pimephales promelas (Fish test acute, static)

LC50 (96 h) 56 mg/l, Brachydanio rerio (Fish test acute, static)

Information on: cyclohexyldimethylamine

LC50 (96 h) 31.58 mg/l, Leuciscus idus (DIN 38412 Part 15, static)

Nominal concentration. The product will cause changes in the pH value of the test system. The result refers to an unneutralized sample. After neutralization, it is no longer toxic.

Information on: 1-Propene, 1-chloro-3,3,3-trifluoro-, (1E)-

LC50 (96 h) 38 mg/l, Oncorhynchus mykiss (OECD 203; ISO 7346; 92/69/EEC, C.1, static)

Aquatic invertebrates

Information on: tris(2-chloro-1-methylethyl)phosphate

EC50 (48 h) 131 mg/l, Daphnia magna (Daphnia test acute, static)

The statement of the toxic effect relates to the analytically determined concentration.

Information on: cyclohexyldimethylamine

LC50 (48 h) 75 mg/l, Daphnia magna (OECD Guideline 202, part 1, static)

The statement of the toxic effect relates to the analytically determined concentration.

Information on: 1-Propene, 1-chloro-3,3,3-trifluoro-, (1E)-

EC50 (48 h) 82 mg/l, Daphnia magna (OECD Guideline 202, part 1, static)

Aquatic plants

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Information on: tris(2-chloro-1-methylethyl)phosphate
EC50 (72 h) 82 mg/l (growth rate), Pseudokirchneriella subcapitata (OECD Guideline 201, static)
Nominal concentration.

Information on: cyclohexyldimethylamine
EC50 (72 h) 3.5 mg/l (growth rate), Pseudokirchneriella subcapitata (OECD Guideline 201, static)
Nominal values (confirmed by concentration control analytics)
EC10 (72 h) 0.6 mg/l (growth rate), Pseudokirchneriella subcapitata (OECD Guideline 201, static)
Nominal values (confirmed by concentration control analytics)

Information on: 1-Propene, 1-chloro-3,3,3-trifluoro-, (1E)-
EC50 (72 h) 106.7 mg/l (growth rate), Pseudokirchneriella subcapitata (OECD Guideline 201, static)
No observed effect concentration (72 h) 115 mg/l (growth rate), Pseudokirchneriella subcapitata
(OECD Guideline 201, static)

Chronic toxicity to aquatic invertebrates

Information on: tris(2-chloro-1-methylethyl)phosphate
No observed effect concentration (21 d) 32 mg/l, Daphnia magna (OECD Guideline 202, part 2,
semistatic)
Nominal concentration.

Information on: cyclohexyldimethylamine
Study scientifically not justified.

Microorganisms/Effect on activated sludge

Toxicity to microorganisms

Information on: tris(2-chloro-1-methylethyl)phosphate

Information on: cyclohexyldimethylamine
DIN 38412 Part 8 static
bacterium/EC10 (17 h): 137 mg/l
Nominal concentration.

Persistence and degradability

Assessment biodegradation and elimination (H₂O)
Poorly biodegradable.

Elimination information

Poorly biodegradable.

Bioaccumulative potential

Assessment bioaccumulation potential
Does not significantly accumulate in organisms.

Mobility in soil

Assessment transport between environmental compartments
Adsorption to solid soil phase is not expected.

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Additional information

Adsorbable organically-bound halogen (AOX):
This product contains no organically-bound halogen.

Other ecotoxicological advice:
The product has not been tested. Do not discharge product into the environment without control.

13. Disposal considerations

Waste disposal of substance:

Do not discharge substance/product into sewer system. Incinerate or dispose of in a licensed facility.

Container disposal:

Do not reuse empty containers. Under no circumstances should empty drums be burned or cut open with gas or electric torch as toxic decomposition products may be liberated. Steel drums must be emptied and can be sent to a licensed drum reconditioner for reuse, a scrap metal dealer or an approved landfill. Do not attempt to refill or clean containers since residue is difficult to remove.

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

State RTK

NJ
PA

CAS Number

98-94-2
111-46-6

Chemical name

cyclohexyldimethylamine
diethylene glycol

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

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WARNING: This product can expose you to chemicals including ETHYLENE OXIDE, 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: 1 Special:

HMIS III rating

Health: 2⁺ Flammability: 1 Physical hazard: 1

16. Other Information

SDS Prepared by:

BASF NA Product Regulations
SDS Prepared on: 2020/01/10

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