

Version: 1.0 Revision Date: 08/13/2015

SAFETY DATA SHEET

1. Identification

Material name: FLEX-CON Material: 069 55

Recommended use and restriction on use

Recommended use: Coatings Restrictions on use: Not known.

Manufacturer/Importer/Supplier/Distributor Information

EUCLID CHEMICAL COMPANY 19218 REDWOOD ROAD CLEVELAND OH 44110 US

Contact person: Telephone: Emergency telephone number: EH&S Department 216-531-9222 1-800-424-9300 (US); 1-613-996-6666 (Canada)

2. Hazard(s) identification

| Hazard Classification | Not classified |
|--|-----------------|
| Label Elements | |
| Hazard Symbol: | No symbol |
| Signal Word: | No signal word. |
| Hazard Statement: | not applicable |
| Precautionary Statement: | not applicable |
| Other hazards which do not result in GHS classification: | None. |

3. Composition/information on ingredients

Mixtures

| Chemical Identity | CAS number | Content in percent (%)* | |
|---|------------|-------------------------|--|
| Ammonium hydroxide | 1336-21-6 | 0.1 - 1% | |
| * All concentrations are percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume. | | | |

4. First-aid measures

Ingestion:

Rinse mouth thoroughly.

Inhalation: Move to fresh air.



| Skin Contact: | Remove contaminated clothing and wash the skin thoroughly with soap and water after work. | |
|--|---|--|
| Eye contact: | Rinse immediately with plenty of water. | |
| Most important symptoms/effects, acute and delayed | | |
| Symptoms: | May cause skin and eye irritation. | |
| Indication of immediate medical attention and special treatment needed | | |
| Treatment: | Get medical attention if symptoms occur. | |
| 5. Fire-fighting measures | | |
| General Fire Hazards: | No unusual fire or explosion hazards noted. | |

Suitable (and unsuitable) extinguishing media

| Suitable extinguishing media: | Use fire-extinguishing media appropriate for surrounding materials. | |
|--|---|--|
| Unsuitable extinguishing media: | Do not use water jet as an extinguisher, as this will spread the fire. | |
| Specific hazards arising from the chemical: | During fire, gases hazardous to health may be formed. | |
| Special protective equipment and precautions for firefighters | | |
| Special fire fighting procedures: | No data available. | |
| Special protective equipment for fire-fighters: | Self-contained breathing apparatus and full protective clothing must be worn in case of fire. | |
| | | |
| 6. Accidental release measure | S | |
| 6. Accidental release measures Personal precautions, protective equipment and emergency procedures: | s No data available. | |
| Personal precautions, protective equipment and | | |
| Personal precautions, protective equipment and emergency procedures: Methods and material for containment and cleaning | No data available. Dam and absorb spillages with sand, earth or other non-combustible material. Collect spillage in containers, seal securely and deliver for | |



| 7. Handling and storage | |
|---|--|
| Precautions for safe handling: | Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. |
| Conditions for safe storage, including any incompatibilities: | Store away from incompatible materials. Store in original tightly closed container. |

8. Exposure controls/personal protection

Control Parameters

Occupational Exposure Limits

| Chemical Identity | type | Exposure Limit Values | Source |
|--------------------|------|-----------------------|---|
| Ammonium hydroxide | STEL | 35 ppm | US. ACGIH Threshold Limit Values (2011) |
| | TWA | 25 ppm | US. ACGIH Threshold Limit Values (2011) |
| | PEL | 50 ppm 35 mg/m3 | US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) (02 2006) |

Appropriate Engineering Controls

Observe good industrial hygiene practices. Observe occupational exposure limits and minimize the risk of inhalation of vapors and mist. Mechanical ventilation or local exhaust ventilation may be required.

Individual protection measures, such as personal protective equipment

| General information: | Use personal protective equipment as required. | |
|---|--|--|
| Eye/face protection: | Wear goggles/face shield. | |
| Skin Protection Hand Protection: Other: | Use suitable protective gloves if risk of skin contact. No data available. | |
| Respiratory Protection: | In case of inadequate ventilation use suitable respirator. Seek advice from | |
| . , | local supervisor. | |
| Hygiene measures: | Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing to remove contaminants. Discard contaminated footwear that cannot be cleaned. | |

9. Physical and chemical properties



Appearance

| Physical state: | | liquid |
|-----------------------|--|---|
| Form: | | liquid |
| Color: | | White |
| Odor: | | Mild |
| Odor threshold: | | No data available. |
| pH: | | 9.3 |
| Melting point/freezi | ng point: | No data available. |
| Initial boiling point | and boiling range: | 100 °C 212 °F |
| Flash Point: | | No data available. |
| Evaporation rate: | | Slower than Ether |
| Flammability (solid | , gas): | No |
| Upper/lower limit or | n flammability or explosi ^v | ve limits |
| Flammability li | mit - upper (%): | No data available. |
| Flammability li | mit - lower (%): | No data available. |
| Explosive limit | : - upper (%): | No data available. |
| Explosive limit | : - lower (%): | No data available. |
| Vapor pressure: | | No data available. |
| Vapor density: | | Vapors are heavier than air and may travel along the floor and in the bottom of containers. |
| Relative density: | | 1.03 |
| Solubility(ies) | | |
| Solubility in wa | ater: | Soluble |
| Solubility (othe | ər): | No data available. |
| Partition coefficient | t (n-octanol/water): | No data available. |
| Auto-ignition tempe | erature: | No data available. |
| Decomposition tem | perature: | No data available. |
| Viscosity: | | No data available. |
| | | |

10. Stability and reactivity

| Reactivity: | No data available. |
|--|---|
| Chemical Stability: | Material is stable under normal conditions. |
| Possibility of Hazardous Reactions: | No data available. |
| Conditions to Avoid: | Avoid heat or contamination. |
| Incompatible Materials: | Strong acids. Strong bases. |
| Hazardous Decomposition Products: | Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapors. |

11. Toxicological information

Information on likely routes of exposure



Version: 1.0 Revision Date: 08/13/2015

| Ingestion: | May be ingested by accident. Ingestion may cause irritation and malaise. |
|---------------|---|
| Inhalation: | In high concentrations, vapors, fumes or mists may irritate nose, throat and mucus membranes. |
| Skin Contact: | Moderately irritating to skin with prolonged exposure. |
| Eye contact: | Eye contact is possible and should be avoided. |

Information on toxicological effects

Acute toxicity (list all possible routes of exposure)

| Oral Product: | No data available. | |
|---|--------------------------|--|
| Dermal Product: | No data available. | |
| Inhalation Product: | No data available. | |
| Repeated dose toxicity Product: | No data available. | |
| Skin Corrosion/Irritation Product: | No data available. | |
| Serious Eye Damage/Eye Irritatio Product: | on No data available. | |
| Specified substance(s): Ammonium hydroxide | Severely Irritating | |
| Respiratory or Skin Sensitization Product: No data available. | | |
| Carcinogenicity Product: | No data available. | |
| IARC Monographs on the Evaluation of Carcinogenic Risks to Humans: No carcinogenic components identified | | |
| US. National Toxicology Program (NTP) Report on Carcinogens: No carcinogenic components identified | | |
| US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050): | | |

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050): No carcinogenic components identified



Germ Cell Mutagenicity

| In vitro Product: | No data available. |
|--|---|
| In vivo Product: | No data available. |
| Reproductive toxicity Product: | No data available. |
| Specific Target Organ Toxicity · Product: | - Single Exposure No data available. |
| Specific Target Organ Toxicity - Product: | - Repeated Exposure No data available. |
| Aspiration Hazard Product: | No data available. |
| Other effects: | No data available. |

12. Ecological information

Ecotoxicity:

Acute hazards to the aquatic environment:

| Fish Product: | No data available. |
|---|---|
| Specified substance(s): Ammonium hydroxide | LC 50 (Western mosquitofish (Gambusia affinis), 96 h): 15 mg/l Mortality |
| Aquatic Invertebrates Product: | No data available. |
| Specified substance(s): Ammonium hydroxide | LC 50 (Water flea (Daphnia magna), 25 h): 60 mg/l Mortality LC 50 (Water flea (Ceriodaphnia dubia), 48 h): > 0 - 10 mg/l Mortality |

Chronic hazards to the aquatic environment:

Fish Product:

No data available.

| Aquatic Invertebrates | |
|-----------------------|--------------------|
| Product: | No data available. |



| Toxicity to Aquatic Plants Product: | No data available. |
|--|---|
| Persistence and Degradability | |
| Biodegradation Product: | No data available. |
| BOD/COD Ratio Product: | No data available. |
| Bioaccumulative Potential Bioconcentration Factor (BC Product: | CF) No data available. |
| Partition Coefficient n-octan Product: | ol / water (log Kow) No data available. |
| Mobility in Soil: | No data available. |
| Other Adverse Effects: | No data available. |
| 13. Disposal considerations | |
| Disposal instructions: | Dispose of waste at an appropriate treatment and disposal facility in accordance with applicable laws and regulations, and product characteristics at time of disposal. |
| Contaminated Packaging: | No data available. |
| 14. Transport information | |
| TDG: | |

Not Regulated

CFR / DOT:

Not Regulated

IMDG:

Not Regulated



15. Regulatory information

US Federal Regulations

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D) None present or none present in regulated quantities.

US. OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

| Chemical Identity | OSHA hazard(s) |
|-------------------|------------------------------|
| Formaldehyde | Acute toxicity |
| | Skin irritation |
| | Skin sensitization |
| | Flammability |
| | respiratory tract irritation |
| | Respiratory sensitization |
| | Cancer |
| | Eye irritation |
| | - |

CERCLA Hazardous Substance List (40 CFR 302.4):

| Chemical Identity | Reportable quantity |
|--------------------|----------------------------|
| Ammonium hydroxide | 1000 lbs. |
| Formaldehyde | 100 lbs. |

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Not listed.

SARA 302 Extremely Hazardous Substance

| Chemical Identity | |
|-------------------|--|
| Formaldehyde | |

Reportableguantity1100 lbs.5

Threshold Planning Quantity 500 lbs.

SARA 304 Emergency Release Notification Chemical Identity Reportable quantity

Ammonium hydroxide Formaldehyde Reportable quant 1000 lbs. 100 lbs.

SARA 311/312 Hazardous Chemical

| Chemical Identity | Threshold Planning Quantity |
|--------------------|-----------------------------|
| Formaldehyde | 500lbs |
| Ammonium hydroxide | 500 lbs |

SARA 313 (TRI Reporting)

None present or none present in regulated quantities.

Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3)

None present or none present in regulated quantities.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):

| Chemical Identity | Reportable quantity |
|-------------------|----------------------------|
| Formaldehyde | 15000 lbs |



One or more components in this product are not listed on or exempt from the Inventory.

All components in this product are listed on or

One or more components in this product are not listed on or exempt from the Inventory.

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exempt from the Inventory.

US State Regulations

US. California Proposition 65

This product contains chemical(s) known to the State of California to cause cancer and/or to cause birth defects or other reproductive harm.

US. New Jersey Worker and Community Right-to-Know Act No ingredient regulated by NJ Right-to-Know Law present.

US. Massachusetts RTK - Substance List

Chemical Identity Formaldehyde

US. Pennsylvania RTK - Hazardous Substances

No ingredient regulated by PA Right-to-Know Law present.

US. Rhode Island RTK

No ingredient regulated by RI Right-to-Know Law present.

Other Regulations:

| Regulatory VOC (less water | 7 g/l |
|----------------------------|--------|
| and exempt solvent): | |
| VOC Method 310: | 0.00 % |

Inventory Status:

Australia AICS:

Canada DSL Inventory List:

EINECS, ELINCS or NLP:

Japan (ENCS) List:

China Inv. Existing Chemical Substances:

Korea Existing Chemicals Inv. (KECI):

Canada NDSL Inventory:

Philippines PICCS:

US TSCA Inventory:



| | not listed on or exempt from the Inventory. |
|-------------------------------------|--|
| New Zealand Inventory of Chemicals: | One or more components in this product are not listed on or exempt from the Inventory. |
| Japan ISHL Listing: | One or more components in this product are not listed on or exempt from the Inventory. |
| Japan Pharmacopoeia Listing: | One or more components in this product are not listed on or exempt from the Inventory. |

16.Other information, including date of preparation or last revision

| Revision Date: | 08/13/2015 |
|----------------------|---|
| Version #: | 1.0 |
| Further Information: | No data available. |
| Disclaimer: | For Industrial Use Only. Keep out of Reach of Children. The hazard information herein is offered solely for the consideration of the user, subject to their own investigation of compliance with applicable regulations, including the safe use of the product under every foreseeable condition. |