





Sika Emseal Safety Data Sheet Product Package

DSF System

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Safety Data Sheet

DSF Foam

EMSEAL Joint Systems, Ltd.

25 Bridle Lane, Westborough, MA 01581 USA www.emseal.com

Preparation Date March 15, 2015 **Revision Date** March 13, 2019

1. Identification of the Substance / Preparation

Product identifier DSF

Other identifier or namesDSF SystemUN ID numberNone

Manufacturer Address EMSEAL LLC

111 Royal Group Crescent

Woodbridge, ON L4H 1X9 Canada

 Company Phone
 (508) 836-0280 M-F 9am - 5pm

 Emergency Phone
 CHEMTREC (800) 424-9300 (24 Hours)

2. Hazardous Indentification

Hazardous Classification This product is not classified as hazardous when used as intended.

Signal Word None
Pictograms None

Emergency Overview: No emergency requirements.

3. Composition / Information on Ingredients

EMSEAL DSF is composed of polyurethane foam impregnated with a proprietary solid acrylic polymer bonded to a fully cured silicone sealant. It is classified as Non-Hazardous.

NOTE: Silicone facing is fully cured. The composition of the silicone in its liquid state is comprised of the following:

Chemical Name	CAS#	% by Weight	GHS Classification Hazard Statements
Methyltrimethoxysilane	1185-55-3	3.0 - 7.0	SELF CLASSIFICATION Classification: Not Applicable
Water and other components. Each of the other components are proprie	tary.		SELF CLASSIFICATION Classification: Not Applicable



4.2 SKIN:

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4. First Aid Measures

4.1 EYES: Flush with water for at least 15 minutes, and call physician if problems persist.

Product may leave a sticky residue, and mild irritation if prolonged exposure. Scrub with soapy water until adhesive is removed.

4.3 INGESTION: Do not eat – call physician if ingested.

5. Fire-fighting Measures

5.2 FLAMMABILITY: Slight. Material can support an open flame or smoldering ignition. The foam can

melt while burning which can contribute fire to spread.

5.2 FLASH POINT: Unknown.5.3 AUTO-IGNITION TEMPERATURE: Unknown.

5.4 EXTINGUISHING MEDIA: Large volumes of water, or ABC chemical may be appropriate for initial control or

small volumes of impregnated foam.

5.5 HAZARDOUS DECOMPOSITION PRODUCTS: Carbon di/mon oxides will be formed as well as other noxious and toxic fumes

upon combustion - do not breath combustion products.

6. Accidental Release Measures

If material is unusable pick up pieces and dispose of in accordance with local regulations; material and all components are non-toxic and normal landfill will most often be acceptable.

7. Handling and Storage

Store in original packaging below 35°C. There are no special handling instructions.

8. Exposure Controls / Personal Protection

8.1 RESPIRATORY PROTECTION: Not required **8.2 EYE PROTECTION:** Not required

8.3 SKIN PROTECTION: Gloves of any material are suitable if desired, but not required. No other protection is required.

9. Physical and Chemical Properties

9.1 APPEARANCE: Dark grey / charcoal colored foam and white silicone with product identifying packaging.

9.2 ODOR: Slight characteristic odor.

9.3 PERCENT SOLIDS BY WEIGHT: 100% **9.4 PHYSICAL STATE:** Solid

 9.5 PERCENT VOLATILE:
 <1% wt/wt</td>

 9.6 DENSITY:
 0.4g/cm3

 9.7 DECOMPOSITION:
 > 300°C

 9.8 SOLUBILITY IN WATER:
 None



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10. Stability and Reactivity

Stable under normal conditions – avoid temperatures in excess of 300°C, strong acids and bases, and open flame.

11. Toxicological Information

Unknown.

12. Ecological Information

Unknown

13. Disposal Considerations

No known hazard. Dispose of in accordance with local regulations; material and all components are non-toxic and disposal in normal landfill will most often be acceptable.

14. Transportation Information

Not hazardous - safe for non-hazardous shipping.

15. Regulatory Information

Unknown.

16. Other Information

No other information provided.

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1. Identification

Product name : Northern Manufacturing Construction Grade Epoxy Part A

Supplier : Northern Manufacturing

111 Royal Group Crescent, Unit NM Woodbridge, ON L4H 1X9 Canada

Telephone : 416-740-2090 (8AM - 5PM EST) (M-F)

Emergency telephone : Chemtrec 1-800-424-9300 (24 Hours)

Recommended use of the chemical and restrictions on

use

: For further information, refer to product data sheet.

2. Hazards identification

GHS Classification

Skin irritation, Category 2

Eye irritation, Category 2A

Skin sensitization, Category 1

Carcinogenicity, Category 1A (Inhalation)

H315: Causes skin irritation.

H319: Causes serious eye irritation.

H317: May cause an allergic skin reaction.

H350i: May cause cancer by inhalation.

Specific target organ systemic toxicity - single exposure, Category 3, Respiratory system

system Specific target (

Specific target organ systemic toxicity repeated exposure, Category 1, Lungs

H372: Causes damage to organs through

H335: May cause respiratory irritation.

prolonged or repeated exposure.

GHS label elements

Hazard pictograms :





Signal Word : Danger

Hazard Statements : H315 Causes skin irritation.

H317 May cause an allergic skin reaction. H319 Causes serious eye irritation. H335 May cause respiratory irritation. H350i May cause cancer by inhalation.

H372 Causes damage to organs (Lungs) through prolonged or

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repeated exposure.

Precautionary Statements

: Prevention:

P201 Obtain special instructions before use.

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

P260 Do not breathe dust/ fume/ gas/ mist/ vapors/ spray.

P264 Wash skin thoroughly after handling.

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

P271 Use only outdoors or in a well-ventilated area.

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

P280 Wear protective gloves/ eye protection/ face protection.

P281 Use personal protective equipment as required.

Response:

P302 + P352 IF ON SKIN: Wash with plenty of soap and water.

P304 + P340 IF INHALED: Remove person to fresh air and

keep comfortable for breathing.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P308 + P313 IF exposed or concerned: Get medical advice/

P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.

P337 + P313 If eye irritation persists: Get medical advice/attention.

P362 Take off contaminated clothing and wash before reuse.

Storage:

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up.

Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

See Section 11 for more detailed information on health effects and symptoms.

There are no hazards not otherwise classified that have been identified during the classification process.

There are no ingredients with unknown acute toxicity used in a mixture at a concentration >= 1%.

3. Composition/information on ingredients

Hazardous ingredients

Chemical name	CAS-No.	Concentration (%)
Quartz (SiO2)	14808-60-7	>= 25 - < 50 %
bisphenol-A-(epichlorhydrin) epoxy resin	25068-38-6	>= 10 - < 20 %
oxirane, mono[(C12-14-	68609-97-2	>= 5 - < 10 %
alkyloxy)methyl]derivatives		

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There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

4. First aid measures

If inhaled : Move to fresh air.

Consult a physician after significant exposure.

In case of skin contact : Take off contaminated clothing and shoes immediately.

Wash off with soap and plenty of water. If symptoms persist, call a physician.

In case of eye contact : Immediately flush eye(s) with plenty of water.

Remove contact lenses.

Keep eye wide open while rinsing.

If eye irritation persists, consult a specialist.

If swallowed : Clean mouth with water and drink afterwards plenty of water.

Do not induce vomiting without medical advice.

Do not give milk or alcoholic beverages.

Never give anything by mouth to an unconscious person.

Obtain medical attention.

Most important symptoms

and effects, both acute and

delayed

irritant effects

sensitizing effects carcinogenic effects

Cough

Respiratory disorder Allergic reactions Excessive lachrymation

Erythema Dermatitis

See Section 11 for more detailed information on health effects

and symptoms.

Causes skin irritation.

May cause an allergic skin reaction. Causes serious eye irritation. May cause respiratory irritation. May cause cancer by inhalation.

Causes damage to organs through prolonged or repeated

exposure.

Protection of first-aiders : Move out of dangerous area.

Consult a physician.

Show this material safety data sheet to the doctor in

attendance.

Notes to physician : Treat symptomatically.

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5. Fire-fighting measures

Suitable extinguishing media : Use extinguishing measures that are appropriate to local

circumstances and the surrounding environment.

Specific extinguishing

methods

: Collect contaminated fire extinguishing water separately. This

must not be discharged into drains.

Fire residues and contaminated fire extinguishing water must

be disposed of in accordance with local regulations.

Special protective equipment

for fire-fighters

: In the event of fire, wear self-contained breathing apparatus.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures Environmental precautions : Use personal protective equipment.

Deny access to unprotected persons.

: Do not flush into surface water or sanitary sewer system. If the product contaminates rivers and lakes or drains inform

respective authorities.

Local authorities should be advised if significant spillages

cannot be contained.

Methods and materials for containment and cleaning up

: Soak up with inert absorbent material (e.g. sand, silica gel,

acid binder, universal binder, sawdust).

Keep in suitable, closed containers for disposal.

7. Handling and storage

Advice on safe handling : Avoid exceeding the given occupational exposure limits (see

section 8).

Do not get in eyes, on skin, or on clothing. For personal protection see section 8.

Persons with a history of skin sensitization problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is

being used.

Smoking, eating and drinking should be prohibited in the

application area.

Follow standard hygiene measures when handling chemical

products.

Conditions for safe storage : Prevent unauthorized access.

Store in original container. Keep in a well-ventilated place. Observe label precautions.

Store in accordance with local regulations.

Materials to avoid : No data available

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8. Exposure controls/personal protection

Component	CAS-No.	Basis **	Value	Exposure limit(s)* / Form of exposure
Quartz (SiO2)	14808-60-7	OSHA Z-3	TWA	10 mg/m3 / %SiO2+2 respirable
		OSHA Z-3	TWA	250 mppcf / %SiO2+5 respirable
		OSHA P0	TWA	0.1 mg/m3 Respirable fraction
		ACGIH	TWA	0.025 mg/m3 Respirable fraction
		OSHA Z-1	TWA	0.05 mg/m3 Respirable dust

^{*}The above mentioned values are in accordance with the legislation in effect at the date of the release of this safety data sheet.

**Basis

ACGIH. Threshold Limit Values (TLV)

OSHA P0. Table Z-1, Limit for Air Contaminat (1989 Vacated Values)

OSHA P1. Permissible Exposure Limits (PEL), Table Z-1, Limit for Air Contaminant

OSHA P2. Permissible Exposure Limits (PEL), Table Z-2

OSHA Z3. Table Z-3, Mineral Dust

Engineering measures

: Use of adequate ventilation should be sufficient to control worker exposure to airborne contaminants. If the use of this product generates dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure below any recommended or statutory limits.

Personal protective equipment

Respiratory protection

: Use a properly fitted NIOSH approved air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary.

The filter class for the respirator must be suitable for the maximum expected contaminant concentration (gas/vapor/aerosol/particulates) that may arise when handling the product. If this concentration is exceeded, self-contained breathing apparatus must be used.

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Hand protection

Remarks : Chemical-resistant, impervious gloves complying with an

approved standard should be worn at all times when handling

chemical products if a risk assessment indicates this is

necessary.

Eye protection : Safety eyewear complying with an approved standard should

be used when a risk assessment indicates this is necessary.

Skin and body protection : Choose body protection in relation to its type, to the

concentration and amount of dangerous substances, and to

the specific work-place.

Hygiene measures : Avoid contact with skin, eyes and clothing.

Wash hands before breaks and immediately after handling the

product.

Remove contaminated clothing and protective equipment

before entering eating areas. Wash thoroughly after handling.

9. Physical and chemical properties

Appearance : paste

Color : white

Odor : aromatic

Odor Threshold : No data available

Flash point : $> 212 \,^{\circ}\text{F} \, (> 100 \,^{\circ}\text{C})$

Ignition temperature : No data available

Decomposition temperature : No data available

Lower explosion limit (Vol%): No data available

Upper explosion limit (Vol%) : No data available

Flammability (solid, gas) : No data available

Oxidizing properties : No data available

pH : Note: Not applicable

Melting point/range /

Freezing point

: No data available

Boiling point/boiling range : No data available

Vapor pressure : 0.01 mmHg (0.01 hpa)

Density : 1.99 g/cm3

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Water solubility : Note: insoluble

Partition coefficient: n-

octanol/water

: No data available

Viscosity, dynamic : No data available

Viscosity, kinematic : > 20.5 mm2/s

Relative vapor density : No data available

Evaporation rate : No data available

Burning rate : No data available

Volatile organic compounds

(VOC) content

5 g/l

A+B Combined

10. Stability and reactivity

Reactivity : No dangerous reaction known under conditions of normal use.

Chemical stability : The product is chemically stable.

Possibility of hazardous

reactions

: Stable under recommended storage conditions.

Conditions to avoid : No data available

Incompatible materials : No data available

11. Toxicological information

Acute toxicity

Not classified based on available information.

Components:

bisphenol-A-(epichlorhydrin) epoxy resin:

Acute oral toxicity : LD50 Oral (Rat): > 5,000 mg/kg

Acute dermal toxicity : LD50 Dermal (Rabbit): > 20,000 mg/kg

Skin corrosion/irritation

Causes skin irritation.

Serious eye damage/eye irritation

Causes serious eye irritation.

Respiratory or skin sensitization

Skin sensitization: May cause an allergic skin reaction.

Respiratory sensitization: Not classified based on available information.

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Germ cell mutagenicity

Not classified based on available information.

Reproductive toxicity

Not classified based on available information.

STOT-single exposure

May cause respiratory irritation.

STOT-repeated exposure

Causes damage to organs (Lungs) through prolonged or repeated exposure.

Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

Aspiration toxicity

Not classified based on available information.

Carcinogenicity

May cause cancer by inhalation.

IARC Group 1: Carcinogenic to humans

Quartz (SiO2) 14808-60-7 Group 2B: Possibly carcinogenic to humans

titanium dioxide 13463-67-7

NTP Known to be human carcinogen

Quartz (SiO2) 14808-60-7

Titanium dioxide (13463-67-7)

In lifetime inhalation studies of rats, airborne respirable-size titanium dioxide particles have seen shown to cause an increase in lung tumors at concentrations associated with substantial particle lung burdens and consequential pulmonary overload and inflammation. The potential for these adverse health effects appears to be closely related to the particle size and the amount of the exposed surface area that comes into contact with the lung. However, tests with other laboratory aninals such as mice and hamsters, indicate that rats are significantly more susceptible to the pulmonary overload and inflammation that cause lung cancer. Epidemiology studies do no suggest an increased risk of cancer in humans from occupational exposure to titanium dioxide. Titanium dioxide has been characterized by IARC as possibly carcinogenic to humans (Group 2B) through inhalation (not ingestion). It has not been characterized as a potential carcinogen by either NTP or OSHA.

12. Ecological information

Other information Do not empty into drains; dispose of this material and its

container in a safe way.

Avoid dispersal of spilled material and runoff and contact

with soil, waterways, drains and sewers.

Component:

bisphenol-A-(epichlorhydrin) epoxy 25068-38-6

Toxicity to fish:

LC50

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resin Species: Oncorhynchus mykiss (rainbow trout)

Dose: 2 mg/l Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates:

EC50

Species: Daphnia magna (Water flea)

Dose: 1.8 mg/l Exposure time: 48 h

13. Disposal considerations

Disposal methods

Waste from residues : Disposal of this product, solutions and any by-products should

at all times comply with the requirements of environmental protection and waste disposal legislation and any regional

local authority requirements.

Contaminated packaging : Empty containers should be taken to an approved waste

handling site for recycling or disposal.

14. Transport information

DOT

Not dangerous goods

IATA

Not dangerous goods

IMDG

Not dangerous goods

Special precautions for user

No data available

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

15. Regulatory information

TSCA list : All chemical substances in this product are either listed on the

TSCA Inventory or are in compliance with a TSCA Inventory

exemption.

EPCRA - Emergency Planning and Community Right-to-Know

CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

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SARA304 Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards : Chronic Health Hazard

Skin corrosion or irritation

Serious eye damage or eye irritation Respiratory or skin sensitization

Carcinogenicity

Specific target organ toxicity (single or repeated exposure)

SARA 302 : This material does not contain any components with a section

302 EHS TPQ.

SARA 313 : This material does not contain any chemical components with

> known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Clean Air Act

Ozone-Depletion

Potential

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act

Section 602 (40 CFR 82, Subpt. A, App.A + B).

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

California Prop 65

WARNING: Cancer and Reproductive Harm -

www.P65Warnings.ca.gov

16. Other information

HMIS Classification



Caution: HMIS® rating is based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® rating is not required on SDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® rating is to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). Please note HMIS® attempts to convey full health warning information to all employees.

Notes to Reader

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Material number: 577437

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1. Identification

Product name : Northern Manufacturing Construction Grade Epoxy Part B

Supplier : Northern Manufacturing

111 Royal Group Crescent, Unit NM Woodbridge, ON L4H 1X9 Canada

Telephone : 416-740-2090 (8AM - 5PM EST) (M-F)

Emergency telephone : Chemtrec 1-800-424-9300 (24 Hours)

Recommended use of the chemical and restrictions on

use

For further information, refer to product data sheet.

2. Hazards identification

GHS Classification

Skin corrosion, Category 1B H314: Causes severe skin burns and eye damage.

Serious eye damage, Category 1 H318: Causes serious eye damage.
Skin sensitization, Category 1 H317: May cause an allergic skin reaction.

Carcinogenicity, Category 1A (Inhalation)
Specific target organ systemic toxicity single exposure, Category 3, Respiratory

H350i: May cause cancer by inhalation.
H335: May cause respiratory irritation.

system

Specific target organ systemic toxicity - H372: Causes damage to organs through

repeated exposure, Category 1, Lungs prolonged or repeated exposure.

GHS label elements

Hazard pictograms







Signal Word : Danger

Hazard Statements : H314 Causes severe skin burns and eye damage.

H317 May cause an allergic skin reaction. H335 May cause respiratory irritation. H350i May cause cancer by inhalation.

H372 Causes damage to organs (Lungs) through prolonged or

repeated exposure.

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Precautionary Statements

: Prevention:

P201 Obtain special instructions before use.

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

P260 Do not breathe dust/ fume/ gas/ mist/ vapors/ spray. P270 Do not eat, drink or smoke when using this product. P271 Use only outdoors or in a well-ventilated area.

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

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

P281 Use personal protective equipment as required.

Response:

P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.

P304 + P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P308 + P313 IF exposed or concerned: Get medical advice/attention.

P310 Immediately call a POISON CENTER/doctor. P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.

P363 Wash contaminated clothing before reuse.

Storage:

P403 + P233 Store in a well-ventilated place. Keep container tightly closed.

P405 Store locked up.

Disposal:

P501 Dispose of contents/ container to an approved waste disposal plant.

Warning

Reports have associated repeated and prolonged exposure to some of the chemicals in this product with permanent brain, liver, kidney and nervous system damage. Intentional misuse by deliberate concentration and inhalation of vapors may be harmful or fatal.

See Section 11 for more detailed information on health effects and symptoms.

There are no hazards not otherwise classified that have been identified during the classification process.

There are no ingredients with unknown acute toxicity used in a mixture at a concentration >= 1%.

3. Composition/information on ingredients

Hazardous ingredients

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Chemical name	CAS-No.	Concentration (%)
Quartz (SiO2)	14808-60-7	>= 25 - < 50 %
N'-(3-aminopropyl)-N,N-dimethylpropane-1,3-diamine	10563-29-8	>= 3 - < 5 %
m-phenylenebis(methylamine)	1477-55-0	>= 1 - < 2 %
Benzyl alcohol	100-51-6	>= 1 - < 2 %
salicylic acid	69-72-7	>= 1 - < 2 %
triethylenetetramine	112-24-3	>= 0.1 - < 1 %

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

4. First aid measures

If inhaled : Move to fresh air.

Consult a physician after significant exposure.

In case of skin contact : Take off contaminated clothing and shoes immediately.

Wash off with soap and plenty of water.

Immediate medical treatment is necessary as untreated wounds from corrosion of the skin heal slowly and with

difficulty.

In case of eye contact : Small amounts splashed into eyes can cause irreversible

tissue damage and blindness.

In the case of contact with eyes, rinse immediately with plenty

of water and seek medical advice.

Continue rinsing eyes during transport to hospital.

Remove contact lenses.

Keep eye wide open while rinsing.

If swallowed : Clean mouth with water and drink afterwards plenty of water.

Do not induce vomiting without medical advice.

Do not give milk or alcoholic beverages.

Never give anything by mouth to an unconscious person.

Take victim immediately to hospital.

Most important symptoms and effects, both acute and delayed

: Health injuries may be delayed.

corrosive effects irritant effects sensitizing effects carcinogenic effects

Cough

Respiratory disorder Allergic reactions Dermatitis

See Section 11 for more detailed information on health effects

and symptoms.

May cause an allergic skin reaction. Causes serious eye damage.

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May cause respiratory irritation. May cause cancer by inhalation.

Causes damage to organs through prolonged or repeated

exposure.

Causes severe burns.

Protection of first-aiders : Move out of dangerous area.

Consult a physician.

Show this material safety data sheet to the doctor in

attendance.

Notes to physician : Treat symptomatically.

5. Fire-fighting measures

Suitable extinguishing media : Use extinguishing measures that are appropriate to local

circumstances and the surrounding environment.

Specific extinguishing

methods

: Collect contaminated fire extinguishing water separately. This

must not be discharged into drains.

Fire residues and contaminated fire extinguishing water must

be disposed of in accordance with local regulations.

Special protective equipment

for fire-fighters

: In the event of fire, wear self-contained breathing apparatus.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures Environmental precautions

: Use personal protective equipment. Deny access to unprotected persons.

: Do not flush into surface water or sanitary sewer system.

If the product contaminates rivers and lakes or drains inform respective authorities.

Local authorities should be advised if significant spillages

cannot be contained.

Methods and materials for containment and cleaning up

Soak up with inert absorbent material (e.g. sand, silica gel,

acid binder, universal binder, sawdust).

Keep in suitable, closed containers for disposal.

7. Handling and storage

Advice on safe handling : Avoid exceeding the given occupational exposure limits (see

section 8).

Do not get in eyes, on skin, or on clothing. For personal protection see section 8.

Persons with a history of skin sensitization problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is

being used.

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Smoking, eating and drinking should be prohibited in the

application area.

Follow standard hygiene measures when handling chemical

products.

Conditions for safe storage : Prevent unauthorized access.

Store in original container. Keep in a well-ventilated place. Observe label precautions.

Store in accordance with local regulations.

Materials to avoid : No data available

8. Exposure controls/personal protection

Component	CAS-No.	Basis **	Value	Exposure limit(s)* / Form of exposure
Quartz (SiO2)	14808-60-7	OSHA Z-3	TWA	10 mg/m3 / %SiO2+2 respirable
		OSHA Z-3	TWA	250 mppcf / %SiO2+5 respirable
		OSHA P0	TWA	0.1 mg/m3 Respirable fraction
		ACGIH	TWA	0.025 mg/m3 Respirable fraction
		OSHA Z-1	TWA	0.05 mg/m3 Respirable dust
m- phenylenebis(methylamin e)	1477-55-0	ACGIH	С	0.1 mg/m3
,		OSHA P0	С	0.1 mg/m3

^{*}The above mentioned values are in accordance with the legislation in effect at the date of the release of this safety data sheet.

**Basis

ACGIH. Threshold Limit Values (TLV)

OSHA P0. Table Z-1, Limit for Air Contaminat (1989 Vacated Values)

OSHA P1. Permissible Exposure Limits (PEL), Table Z-1, Limit for Air Contaminant

OSHA P2. Permissible Exposure Limits (PEL), Table Z-2

OSHA Z3. Table Z-3, Mineral Dust

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Engineering measures : Use of adequate ventilation should be sufficient to control

worker exposure to airborne contaminants. If the use of this product generates dust, fumes, gas, vapor or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure below any

recommended or statutory limits.

Personal protective equipment

Respiratory protection : Use a properly fitted NIOSH approved air-purifying or air-fed

respirator complying with an approved standard if a risk

assessment indicates this is necessary.

The filter class for the respirator must be suitable for the

maximum expected contaminant concentration

(gas/vapor/aerosol/particulates) that may arise when handling the product. If this concentration is exceeded, self-contained

breathing apparatus must be used.

Hand protection

Remarks : Chemical-resistant, impervious gloves complying with an

approved standard should be worn at all times when handling

chemical products if a risk assessment indicates this is

necessary.

Eye protection : Safety eyewear complying with an approved standard should

be used when a risk assessment indicates this is necessary.

Skin and body protection : Choose body protection in relation to its type, to the

concentration and amount of dangerous substances, and to

the specific work-place.

Hygiene measures : Avoid contact with skin, eyes and clothing.

Wash hands before breaks and immediately after handling the

product.

Remove contaminated clothing and protective equipment

before entering eating areas. Wash thoroughly after handling.

9. Physical and chemical properties

Appearance : paste

Color : dark gray

Odor : amine-like

Odor Threshold : No data available

Flash point : $> 212 \,^{\circ}\text{F} \, (> 100 \,^{\circ}\text{C})$

Ignition temperature : No data available

Decomposition temperature : No data available

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Lower explosion limit (Vol%): No data available

Upper explosion limit (Vol%): No data available

Flammability (solid, gas): No data available

Oxidizing properties : No data available

рΗ : Note: Not applicable

Melting point/range /

Freezing point

: No data available

Boiling point/boiling range : No data available

Vapor pressure 0.01 mmHg (0.01 hpa)

Density 2.01 g/cm3

Water solubility Note: slightly soluble

Partition coefficient: n-

octanol/water

: No data available

No data available Viscosity, dynamic

> 20.5 mm2/sViscosity, kinematic

Relative vapor density No data available

Evaporation rate No data available

Burning rate No data available

Volatile organic compounds : 5 g/l

(VOC) content

A+B Combined

10. Stability and reactivity

: No dangerous reaction known under conditions of normal use. Reactivity

Chemical stability : The product is chemically stable.

Possibility of hazardous

reactions

: Stable under recommended storage conditions.

Conditions to avoid : No data available

: No data available Incompatible materials

11. Toxicological information

Acute toxicity

Not classified based on available information.

Components:

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m-phenylenebis(methylamine):

Acute oral toxicity : LD50 Oral (Rat): 930 mg/kg

Acute inhalation toxicity : LC50 (Rat): 1.34 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

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Acute dermal toxicity : LD50 Dermal (Rat): > 3,100 mg/kg

Benzyl alcohol:

Acute oral toxicity : LD50 Oral (Rat): 1,620 mg/kg

Acute inhalation toxicity : LC50 (Rat): > 4.178 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

salicylic acid:

Acute oral toxicity : LD50 Oral (Rat): 891 mg/kg

Acute dermal toxicity : LD50 Dermal (Rat): > 2,000 mg/kg

triethylenetetramine:

Acute oral toxicity : LD50 Oral (Rat): 1,716 mg/kg

Acute dermal toxicity : LD50 Dermal (Rabbit): 1,465 mg/kg

Skin corrosion/irritation

Causes severe burns.

Serious eye damage/eye irritation

Causes serious eye damage.

Respiratory or skin sensitization

Skin sensitization: May cause an allergic skin reaction.

Respiratory sensitization: Not classified based on available information.

Germ cell mutagenicity

Not classified based on available information.

Reproductive toxicity

Not classified based on available information.

STOT-single exposure

May cause respiratory irritation.

STOT-repeated exposure

Causes damage to organs (Lungs) through prolonged or repeated exposure.

Reports have associated repeated and prolonged exposure to some of the chemicals in this product with permanent brain, liver, kidney and nervous system damage. Intentional misuse by deliberate concentration and inhalation of vapors may be harmful or fatal.

Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.

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Aspiration toxicity

Not classified based on available information.

Carcinogenicity

May cause cancer by inhalation.

IARC Group 1: Carcinogenic to humans

> 14808-60-7 Quartz (SiO2)

NTP Known to be human carcinogen

> Quartz (SiO2) 14808-60-7

12. Ecological information

Other information Do not empty into drains; dispose of this material and its

container in a safe way.

Avoid dispersal of spilled material and runoff and contact

with soil, waterways, drains and sewers.

Component:

1477-55-0 Toxicity to fish: LC50

phenylenebis(methylamine

Species: Oryzias latipes (Japanese medaka)

Dose: > 10 - 100 mg/l Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates:

EC50

Species: Daphnia magna (Water flea)

Dose: > 10 - 100 mg/l Exposure time: 48 h

Benzyl alcohol 100-51-6 Toxicity to fish:

LC50 Species: Fish Dose: > 100 mg/l Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates:

EC50

Species: Daphnia magna (Water flea)

Dose: > 100 mg/l Exposure time: 48 h

triethylenetetramine 112-24-3 Toxicity to fish:

LC50

Species: Pimephales promelas (fathead minnow)

Dose: > 100 mg/l Exposure time: 96 h

Toxicity to daphnia and other aquatic invertebrates:

EC50

Species: Daphnia Dose: 10 - 100 mg/l Exposure time: 48 h

Toxicity to algae:

EC50

Species: Pseudokirchneriella subcapitata (green algae)

Dose: 10 - 100 mg/l Exposure time: 72 h

13. Disposal considerations

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Disposal methods

Waste from residues : Disposal of this product, solutions and any by-products should

at all times comply with the requirements of environmental protection and waste disposal legislation and any regional

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local authority requirements.

Contaminated packaging : Empty containers should be taken to an approved waste

handling site for recycling or disposal.

14. Transport information

DOT

UN number 1760

Description of the goods Corrosive liquids, n.o.s.

(N'-(3-aminopropyl)-N,N-dimethylpropane-1,3-diamine, m-

phenylenebis(methylamine))

Class 8
Packing group III
Labels 8
Emergency Response 154

Guidebook Number

IATA

UN number 1760

Description of the goods Corrosive liquid, n.o.s.

(N'-(3-aminopropyl)-N,N-dimethylpropane-1,3-diamine, m-

phenylenebis(methylamine))

Class 8
Packing group III
Labels 8
Packing instruction (cargo 856

aircraft)

Packing instruction 852

(passenger aircraft)

Packing instruction Y841

(passenger aircraft)

IMDG

UN number 1760

Description of the goods CORROSIVE LIQUID, N.O.S.

(N'-(3-aminopropyl)-N,N-dimethylpropane-1,3-diamine, m-

phenylenebis(methylamine))

Revision Date 12/05/2019 Print Date 12/05/2019

Class 8 Packing group Ш Labels 8 EmS Number 1 F-A EmS Number 2 S-B Marine pollutant

DOT: For Limited Quantity exceptions reference 49 CFR 173.154 (b)

no

IMDG: For Limited Quantity special provisions reference IMDG Code Chapter 3.4

Special precautions for user

No data available

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

15. Regulatory information

TSCA list : All chemical substances in this product are either listed on the

TSCA Inventory or are in compliance with a TSCA Inventory

exemption.

EPCRA - Emergency Planning and Community Right-to-Know

CERCLA Reportable Quantity

This material does not contain any components with a CERCLA RQ.

SARA304 Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards : Chronic Health Hazard

Skin corrosion or irritation

Serious eye damage or eye irritation Respiratory or skin sensitization

Carcinogenicity

Specific target organ toxicity (single or repeated exposure)

SARA 302 : This material does not contain any components with a section

302 EHS TPQ.

SARA 313 : This material does not contain any chemical components with

known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

Clean Air Act

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Ozone-Depletion Potential

This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act

Section 602 (40 CFR 82, Subpt. A, App.A + B).

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

California Prop 65

WARNING: Cancer – www.P65Warnings.ca.gov

16. Other information

HMIS Classification



Caution: HMIS® rating is based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® rating is not required on SDSs under 29 CFR 1910.1200, the preparer may choose to provide them. HMIS® rating is to be used with a fully implemented HMIS® program. HMIS® is a registered mark of the National Paint & Coatings Association (NPCA). Please note HMIS® attempts to convey full health warning information to all employees.

Revision Date 12/05/2019

Material number: 579211



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SECTION 1. IDENTIFICATION

Product name : DOW CORNING(R) 748 NON-CORROSIVE SEALANT

Product code : 00000000002184346

Manufacturer or supplier's details

Company name of supplier : Dow Corning Corporation

Address : South Saginaw Road

Midland Michigan 48686

Telephone : (989) 496-6000

Emergency telephone : 24 Hour Emergency Telephone : (989) 496-5900

CHEMTREC: (800) 424-9300

Recommended use of the chemical and restrictions on use

Recommended use : Adhesive, binding agents

SECTION 2. HAZARDS IDENTIFICATION

GHS Classification

Skin sensitization : Category 1

GHS Label element

Hazard pictograms :

Signal Word : Warning

Hazard Statements : H317 May cause an allergic skin reaction.

Precautionary Statements : Prevention:

P261 Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.
P272 Contaminated work clothing must not be allowed out of

the workplace.

P280 Wear protective gloves.

Response:

P302 + P352 IF ON SKIN: Wash with plenty of soap and water. P333 + P313 If skin irritation or rash occurs: Get medical advice/

attention.

P363 Wash contaminated clothing before reuse.

Disposal:

P501 Dispose of contents/ container to an approved waste dis-

posal plant.



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Other hazards

None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Chemical nature : Sealant

Hazardous ingredients

Chemical Name	CAS-No.	Concentration (%)
Calcium carbonate	471-34-1	>= 30 - < 50
Titanium dioxide	13463-67-7	>= 1 - < 5
Methyltrimethoxysilane	1185-55-3	>= 1 - < 5
Stearic acid	57-11-4	>= 1 - < 5
Methanol	67-56-1	>= 0.1 - < 1

SECTION 4. FIRST AID MEASURES

General advice : In the case of accident or if you feel unwell, seek medical ad-

vice immediately.

When symptoms persist or in all cases of doubt seek medical

advice.

If inhaled : If inhaled, remove to fresh air.

Get medical attention if symptoms occur.

In case of skin contact : In case of contact, immediately flush skin with soap and plenty

of water.

Remove contaminated clothing and shoes.

Get medical attention. Wash clothing before reuse.

Thoroughly clean shoes before reuse.

In case of eye contact : Flush eyes with water as a precaution.

Get medical attention if irritation develops and persists.

If swallowed, DO NOT induce vomiting.

Get medical attention if symptoms occur. Rinse mouth thoroughly with water.

Most important symptoms and effects, both acute and

delayed

: May cause an allergic skin reaction.

Protection of first-aiders : First Aid responders should pay attention to self-protection,

and use the recommended personal protective equipment

when the potential for exposure exists.



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Notes to physician : Treat symptomatically and supportively.

SECTION 5. FIRE-FIGHTING MEASURES

Suitable extinguishing media : Water spray

Alcohol-resistant foam Carbon dioxide (CO2)

Dry chemical

Unsuitable extinguishing

media

None known.

Specific hazards during fire

fighting

: Exposure to combustion products may be a hazard to health.

Hazardous combustion prod-

ucts

: Carbon oxides Silicon oxides

> Formaldehyde Metal oxides

Specific extinguishing meth-

ods

: Use extinguishing measures that are appropriate to local cir-

cumstances and the surrounding environment. Use water spray to cool unopened containers.

Remove undamaged containers from fire area if it is safe to do

SO.

Evacuate area.

Special protective equipment

for fire-fighters

In the event of fire, wear self-contained breathing apparatus.

Use personal protective equipment.

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emer-

gency procedures

Use personal protective equipment.

Follow safe handling advice and personal protective equip-

ment recommendations.

Environmental precautions : Discharge into the environment must be avoided.

Prevent further leakage or spillage if safe to do so. Retain and dispose of contaminated wash water.

Local authorities should be advised if significant spillages

cannot be contained.

Methods and materials for containment and cleaning up

: Soak up with inert absorbent material.

For large spills, provide diking or other appropriate containment to keep material from spreading. If diked material can be pumped, store recovered material in appropriate container. Clean up remaining materials from spill with suitable absor-

bent.

Local or national regulations may apply to releases and disposal of this material, as well as those materials and items employed in the cleanup of releases. You will need to deter-



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mine which regulations are applicable.

Sections 13 and 15 of this SDS provide information regarding

certain local or national requirements.

SECTION 7. HANDLING AND STORAGE

Technical measures : See Engineering measures under EXPOSURE

CONTROLS/PERSONAL PROTECTION section.

Local/Total ventilation : Use only with adequate ventilation.

Advice on safe handling : Do not get on skin or clothing.

Do not swallow.

Avoid contact with eyes.

Handle in accordance with good industrial hygiene and safety

practice.

Keep away from water. Protect from moisture.

Take care to prevent spills, waste and minimize release to the

environment.

Conditions for safe storage : Keep in properly labeled containers.

Store in accordance with the particular national regulations.

Materials to avoid : Do not store with the following product types:

Strong oxidizing agents

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Ingredients	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Calcium carbonate	471-34-1	TWA (Respirable)	5 mg/m3 (Calcium car- bonate)	NIOSH REL
		TWA (total)	10 mg/m3 (Calcium car- bonate)	NIOSH REL
Titanium dioxide	13463-67-7	TWA (total dust)	15 mg/m3	OSHA Z-1
		TWA	10 mg/m3 (Titanium dioxide)	ACGIH
Methyltrimethoxysilane	1185-55-3	TWA	50 ppm	DCC OEL
Stearic acid	57-11-4	TWA	10 mg/m3	ACGIH
Methanol	67-56-1	TWA	200 ppm	ACGIH
		STEL	250 ppm	ACGIH
		TWA	200 ppm 260 mg/m3	NIOSH REL
		ST	250 ppm	NIOSH REL

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	325 mg/m3	
TWA	200 ppm	OSHA Z-1
	260 mg/m3	

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Occupational exposure limits of decomposition products

Ingredients	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Methanol	67-56-1	TWA	200 ppm	ACGIH
		STEL	250 ppm	ACGIH
		TWA	200 ppm 260 mg/m3	NIOSH REL
		ST	250 ppm 325 mg/m3	NIOSH REL
		TWA	200 ppm 260 mg/m3	OSHA Z-1

Biological occupational exposure limits

Ingredients	CAS-No.	Control parameters	Biological specimen	Sam- pling time	Permissible concentration	Basis
Methanol	67-56-1	Methanol	Urine	End of shift (As soon as possible after exposure ceases)	15 mg/l	ACGIH BEI

Engineering measures

Processing may form hazardous compounds (see section

Ensure adequate ventilation, especially in confined areas.

Minimize workplace exposure concentrations.

Dust formation may be relevant in the processing of this product. In addition to substance-specific OELs, general limitations of concentrations of particulates in the air at workplaces have to be considered in workplace risk assessment. Relevant limits include: OSHA PEL for Particulates Not Otherwise Regulated of 15 mg/m3 - total dust, 5 mg/m3 - respirable fraction; and ACGIH TWA for Particles (insoluble or poorly soluble) Not Otherwise Specified of 3 mg/m3 - respir-

able particles, 10 mg/m3 - inhalable particles.

Personal protective equipment

Respiratory protection

: General and local exhaust ventilation is recommended to maintain vapor exposures below recommended limits. Where concentrations are above recommended limits or are unknown, appropriate respiratory protection should be worn. Follow OSHA respirator regulations (29 CFR 1910.134) and use NIOSH/MSHA approved respirators. Protection provided by air purifying respirators against exposure to any hazardous chemical is limited. Use a positive pressure air supplied respirator if there is any potential for uncontrolled



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release, exposure levels are unknown, or any other

circumstance where air purifying respirators may not provide

adequate protection.

Hand protection

Material : Impervious gloves

Remarks : Choose gloves to protect hands against chemicals depending

on the concentration specific to place of work. Breakthrough time is not determined for the product. Change gloves often! For special applications, we recommend clarifying the resistance to chemicals of the aforementioned protective gloves with the glove manufacturer. Wash hands before

breaks and at the end of workday.

Eye protection : Wear the following personal protective equipment:

Safety glasses

Skin and body protection : Select appropriate protective clothing based on chemical

resistance data and an assessment of the local exposure

potential.

Skin contact must be avoided by using impervious protective

clothing (gloves, aprons, boots, etc).

Hygiene measures : Ensure that eye flushing systems and safety showers are

located close to the working place. When using do not eat, drink or smoke. Wash contaminated clothing before re-use.

These precautions are for room temperature handling. Use at elevated temperature or aerosol/spray applications may re-

quire added precautions.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : paste

Color : white

Odor : alcohol-like

Odor Threshold : No data available

pH : Not applicable

Melting point/freezing point : No data available

Initial boiling point and boiling

range

: Not applicable

Flash point : Not applicable



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Evaporation rate : Not applicable

Flammability (solid, gas) : Not classified as a flammability hazard

Upper explosion limit : No data available

Lower explosion limit : No data available

Vapor pressure : Not applicable

Relative vapor density : No data available

Relative density : 1.34

Solubility(ies)

Water solubility : No data available

Partition coefficient: n-

octanol/water

: No data available

Autoignition temperature : No data available

Decomposition temperature : No data available

Viscosity

Viscosity, dynamic : Not applicable

Explosive properties : Not explosive

Oxidizing properties : The substance or mixture is not classified as oxidizing.

Molecular weight : No data available

SECTION 10. STABILITY AND REACTIVITY

Reactivity : Not classified as a reactivity hazard.

Chemical stability : Stable under normal conditions.

Possibility of hazardous reac-

tions

: Use at elevated temperatures may form highly hazardous

compounds.

Can react with strong oxidizing agents.

Hazardous decomposition products will be formed upon con-

tact with water or humid air.

Hazardous decomposition products will be formed at elevated

temperatures.

Conditions to avoid : Exposure to moisture.

Incompatible materials : Oxidizing agents

Water



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Hazardous decomposition products

Contact with water or hu-

mid air

: Methanol

Thermal decomposition : Formaldehyde

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Skin contact Ingestion Eye contact

Acute toxicity

Not classified based on available information.

Product:

Acute oral toxicity : Acute toxicity estimate: > 5,000 mg/kg

Method: Calculation method

Acute inhalation toxicity : Acute toxicity estimate: > 40 mg/l

> Exposure time: 4 h Test atmosphere: vapor Method: Calculation method

: Acute toxicity estimate: > 5,000 mg/kg Acute dermal toxicity

Method: Calculation method

Ingredients:

Calcium carbonate:

: LD50 (Rat): > 2,000 mg/kg Acute oral toxicity

Method: OECD Test Guideline 420

Assessment: The substance or mixture has no acute oral tox-

icity

Acute inhalation toxicity : LC50 (Rat): > 3 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist Method: OECD Test Guideline 403

Assessment: The substance or mixture has no acute inhala-

tion toxicity

: LD50 (Rabbit): > 2,000 mg/kg Acute dermal toxicity

Method: OECD Test Guideline 402

Assessment: The substance or mixture has no acute dermal

toxicity

Titanium dioxide:

Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg

Acute inhalation toxicity : LC50 (Rat): > 6.82 mg/l



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Exposure time: 4 h

Test atmosphere: dust/mist

Assessment: The substance or mixture has no acute inhala-

tion toxicity

Methyltrimethoxysilane:

Acute oral toxicity : LD50 (Rat): 12.3 ml/kg

Assessment: The substance or mixture has no acute oral tox-

icity

Remarks: Information taken from reference works and the

literature.

Acute inhalation toxicity : LC50 (Rat): > 42.1 mg/l

Exposure time: 6 h
Test atmosphere: vapor

Assessment: The substance or mixture has no acute inhala-

tion toxicity

Remarks: Based on test data

Acute dermal toxicity : LD50 (Rabbit): > 9,500 mg/kg

Assessment: The substance or mixture has no acute dermal

toxicity

Remarks: Based on test data

Stearic acid:

Acute oral toxicity : LD50: > 2,000 mg/kg

Method: OECD Test Guideline 401

Assessment: The substance or mixture has no acute oral tox-

icity

Acute inhalation toxicity : LC50 (Rat): > 0.1621 mg/l

Exposure time: 4 h
Test atmosphere: vapor

Assessment: The substance or mixture has no acute inhala-

tion toxicity

Acute dermal toxicity : LD50 (Rabbit): > 2,000 mg/kg

Assessment: The substance or mixture has no acute dermal

toxicity

Methanol:

Acute oral toxicity : Acute toxicity estimate (Humans): 300 mg/kg

Method: Expert judgment

Acute inhalation toxicity : Acute toxicity estimate (Humans): 3 mg/l

Test atmosphere: vapor Method: Expert judgment

Acute dermal toxicity : Acute toxicity estimate (Humans): 300 mg/kg

Method: Expert judgment

Skin corrosion/irritation

Not classified based on available information.



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Ingredients:

Calcium carbonate:

Species: Rabbit

Method: OECD Test Guideline 404

Result: No skin irritation

Titanium dioxide:

Species: Rabbit

Result: No skin irritation

Methyltrimethoxysilane:

Species: Rabbit

Result: No skin irritation Remarks: Based on test data

rtomarko. Bacca on tool date

Stearic acid:

Species: Rabbit

Result: No skin irritation

Methanol:

Species: Rabbit

Result: No skin irritation

Serious eye damage/eye irritation

Not classified based on available information.

Ingredients:

Calcium carbonate:

Species: Rabbit

Result: No eye irritation

Method: OECD Test Guideline 405

Titanium dioxide:

Species: Rabbit

Result: No eye irritation

Methyltrimethoxysilane:

Species: Rabbit

Result: No eye irritation Remarks: Based on test data

Stearic acid:

Species: Rabbit

Result: No eye irritation

Methanol:

Species: Rabbit

Result: No eye irritation

Respiratory or skin sensitization

Skin sensitization: May cause an allergic skin reaction.

Respiratory sensitization: Not classified based on available information.



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Ingredients:

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Calcium carbonate:

Test Type: Local lymph node assay (LLNA)

Routes of exposure: Skin contact

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Species: Mouse

Method: OECD Test Guideline 429

Result: negative

Titanium dioxide:

Test Type: Local lymph node assay (LLNA)

Routes of exposure: Skin contact

Species: Mouse Result: negative

Methyltrimethoxysilane:

Assessment: Probability or evidence of low to moderate skin sensitization rate in humans

Test Type: Buehler Test Species: Guinea pig

Remarks: Based on test data

Stearic acid:

Test Type: Buehler Test

Routes of exposure: Skin contact

Species: Guinea pig Result: negative

Methanol:

Test Type: Maximization Test (GPMT) Routes of exposure: Skin contact

Species: Guinea pig Result: negative

Germ cell mutagenicity

Not classified based on available information.

Ingredients:

Calcium carbonate:

Genotoxicity in vitro : Test Type: In vitro mammalian cell gene mutation test

Result: negative

Titanium dioxide:

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)

Result: negative

Genotoxicity in vivo : Test Type: In vivo micronucleus test

Species: Mouse Result: negative

Methyltrimethoxysilane:

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)

Result: negative

Remarks: Based on test data



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Genotoxicity in vivo : Test Type: Mammalian erythrocyte micronucleus test (in vivo

cytogenetic assay) Species: Mouse

Application Route: Ingestion

Result: negative

Remarks: Based on test data

Germ cell mutagenicity -

Assessment

: Animal testing did not show any mutagenic effects.

Stearic acid:

Genotoxicity in vitro : Test Type: Chromosome aberration test in vitro

Method: OECD Test Guideline 473

Result: negative

Remarks: Based on data from similar materials

Methanol:

Genotoxicity in vitro : Test Type: Bacterial reverse mutation assay (AMES)

Method: OECD Test Guideline 471

Result: negative

: Test Type: In vitro mammalian cell gene mutation test

Method: OECD Test Guideline 476

Result: negative

Genotoxicity in vivo : Test Type: Mammalian erythrocyte micronucleus test (in vivo

cytogenetic assay) Species: Mouse

Application Route: Intraperitoneal injection

Result: negative

Carcinogenicity

Not classified based on available information.

Ingredients:

Titanium dioxide:

Species: Rat

Application Route: inhalation (dust/mist/fume)

Exposure time: 24 Months

Method: OECD Test Guideline 453

Result: positive

Remarks: The mechanism or mode of action may not be relevant in humans.

The substance is inextricably bound in the product and therefore does not contribute to a dust

inhalation hazard.

Carcinogenicity - Assess-

: Limited evidence of carcinogenicity in inhalation studies with

ment animals.

Methanol: Species: Mouse

Application Route: inhalation (vapor)

Exposure time: 18 Months



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Method: OECD Test Guideline 453

Result: negative

IARC Group 2B: Possibly carcinogenic to humans

Titanium dioxide 13463-67-7

OSHA No ingredient of this product present at levels greater than or

equal to 0.1% is identified as a carcinogen or potential carcino-

gen by OSHA.

NTP No ingredient of this product present at levels greater than or

equal to 0.1% is identified as a known or anticipated carcinogen

by NTP.

Reproductive toxicity

Not classified based on available information.

Ingredients:

Calcium carbonate:

Effects on fertility : Test Type: Combined repeated dose toxicity study with the

reproduction/developmental toxicity screening test

Species: Rat

Application Route: Ingestion Method: OECD Test Guideline 422

Result: negative

Effects on fetal development : Test Type: Reproduction/Developmental toxicity screening

test

Species: Rat

Application Route: Ingestion Method: OECD Test Guideline 422

Result: negative

Methyltrimethoxysilane:

Effects on fertility : Test Type: Combined repeated dose toxicity study with the

reproduction/developmental toxicity screening test

Species: Rat, male and female Application Route: Ingestion Symptoms: No effects on fertility. Remarks: Based on test data

Effects on fetal development : Test Type: Combined repeated dose toxicity study with the

reproduction/developmental toxicity screening test

Species: Rat, male and female Application Route: Ingestion

Symptoms: No effects on fetal development.

Remarks: Based on test data

Reproductive toxicity - As-

sessment

: No evidence of adverse effects on sexual function and fertility,

or on development, based on animal experiments.

Stearic acid:



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Effects on fertility : Test Type: Combined repeated dose toxicity study with the

reproduction/developmental toxicity screening test

Species: Rat

Application Route: Ingestion Method: OECD Test Guideline 422

Result: negative

Effects on fetal development : Test Type: Combined repeated dose toxicity study with the

reproduction/developmental toxicity screening test

Species: Rat

Application Route: Ingestion Method: OECD Test Guideline 422

Result: negative

Methanol:

Effects on fertility : Test Type: Fertility/early embryonic development

Species: Mouse

Application Route: Ingestion

Result: negative

Effects on fetal development : Test Type: Embryo-fetal development

Species: Mouse

Application Route: Ingestion Method: OECD Test Guideline 414

Result: positive

Remarks: The effects were seen only at maternally toxic dos-

es.

STOT-single exposure

Not classified based on available information.

Ingredients:

Methanol:

Target Organs: Eyes, Central nervous system Assessment: Causes damage to organs.

STOT-repeated exposure

Not classified based on available information.

Ingredients:

Methyltrimethoxysilane:

Routes of exposure: inhalation (vapor)

Assessment: No significant health effects observed in animals at concentrations of 1 mg/l/6h/d or

less.

Routes of exposure: Ingestion

Assessment: No significant health effects observed in animals at concentrations of 100 mg/kg

bw or less.

Repeated dose toxicity

Ingredients:



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Calcium carbonate:

Species: Rat

NOAEL: 1,000 mg/kg Application Route: Ingestion Exposure time: 6 w

Method: OECD Test Guideline 422

Titanium dioxide:

Species: Rat

NOAEL: 24,000 mg/kg Application Route: Ingestion Exposure time: 28 d

Species: Rat NOAEL: 10 mg/m3

Application Route: inhalation (dust/mist/fume)

Exposure time: 2 y

Remarks: The substance is inextricably bound in the product and therefore does not contribute

to a dust inhalation hazard.

Methyltrimethoxysilane:

Species: Rat

Application Route: inhalation (vapor)

Remarks: Based on test data

Species: Rat

Application Route: Ingestion Remarks: Based on test data

Stearic acid: Species: Rat

NOAEL: 1,000 mg/kg Application Route: Ingestion

Exposure time: 42 d

Method: OECD Test Guideline 422

Methanol:

Species: Rat NOAEL: 1.06 mg/l

Application Route: inhalation (vapor)

Exposure time: 90 d

Aspiration toxicity

Not classified based on available information.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Ingredients:

Calcium carbonate:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): > 100 mg/l



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Exposure time: 96 h

Method: OECD Test Guideline 203

Toxicity to daphnia and other

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): > 100 mg/l

Exposure time: 48 h

Method: OECD Test Guideline 202

Toxicity to algae : ErC50 (Desmodesmus subspicatus (green algae)): > 14 mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

Titanium dioxide:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): > 100 mg/l

Exposure time: 96 h

Method: OECD Test Guideline 203

Toxicity to daphnia and other

aquatic invertebrates

: EC50 (Daphnia magna (Water flea)): > 100 mg/l

Exposure time: 48 h

Toxicity to algae : EC50 (Skeletonema costatum (marine diatom)): > 10,000 mg/l

Exposure time: 72 h

Toxicity to bacteria : EC50: > 1,000 mg/l

Exposure time: 3 h

Method: OECD Test Guideline 209

Methyltrimethoxysilane:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): > 100 mg/l

Exposure time: 96 h

Method: OECD Test Guideline 203

Toxicity to daphnia and other

aquatic invertebrates

: EC50 (Daphnia sp.): > 100 mg/l

Exposure time: 48 h

Method: OECD Test Guideline 202

Toxicity to algae : ErC50 (Pseudokirchneriella subcapitata (green algae)): > 100

mg/l

Exposure time: 72 h

Method: OECD Test Guideline 201

Toxicity to bacteria : EC50: > 100 mg/l

Method: OECD Test Guideline 209

Stearic acid:

Toxicity to fish : LC50 (Leuciscus idus (Golden orfe)): > 10,000 mg/l

Exposure time: 48 h

Toxicity to daphnia and other

aquatic invertebrates

EC50 (Daphnia magna (Water flea)): > 4.8 mg/l

Exposure time: 48 h

Method: OECD Test Guideline 202

Remarks: No toxicity at the limit of solubility.

Toxicity to algae : EC50 (Pseudokirchneriella subcapitata (green algae)): > 0.9

mg/l



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Exposure time: 72 h

Method: OECD Test Guideline 201

Remarks: No toxicity at the limit of solubility.

Toxicity to daphnia and other

aquatic invertebrates (Chron-

ic toxicity)

NOEC (Daphnia magna (Water flea)): > 0.22 mg/l

Exposure time: 21 d

Method: OECD Test Guideline 211

Remarks: No toxicity at the limit of solubility.

Toxicity to bacteria : EC10 (Pseudomonas putida): 883 mg/l

Exposure time: 16 h

Methanol:

Toxicity to fish : LC50 (Lepomis macrochirus (Bluegill sunfish)): 15,400 mg/l

Exposure time: 96 h

Toxicity to daphnia and other

aquatic invertebrates

: EC50 (Daphnia magna (Water flea)): > 10,000 mg/l

Exposure time: 48 h

Toxicity to algae : EC50 (Pseudokirchneriella subcapitata (green algae)): 22,000

mg/l

Exposure time: 96 h Method: OPPTS 850.5400

Toxicity to fish (Chronic tox-

icity)

NOEC (Oryzias latipes (Orange-red killifish)): 15,800 mg/l

Exposure time: 200 h

Toxicity to bacteria : EC50: 20,000 mg/l

Exposure time: 15 h

Persistence and degradability

Ingredients:

Methyltrimethoxysilane:

Stability in water : Degradation half life: 2.2 h pH: 7

Stearic acid:

Biodegradability : Result: Readily biodegradable.

Biodegradation: 93 % Exposure time: 28 d

Method: OECD Test Guideline 301B

Methanol:

Biodegradability : Result: Readily biodegradable.

Biodegradation: 95 % Exposure time: 20 d

Bioaccumulative potential

Ingredients:

Methyltrimethoxysilane:

Partition coefficient: n-

octanol/water

: log Pow: -2.36



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Stearic acid:

Bioaccumulation : Species: Fish

Bioconcentration factor (BCF): 238 - 288 Remarks: Based on data from similar materials

Partition coefficient: n-

octanol/water

: log Pow: > 5

Methanol:

Bioaccumulation : Species: Leuciscus idus (Golden orfe)

Bioconcentration factor (BCF): < 10

Partition coefficient: n-

octanol/water

: log Pow: -0.77

Mobility in soil
No data available

Other adverse effects

No data available

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Resource Conservation and

Recovery Act (RCRA)

 This product has been evaluated for RCRA characteristics and does not meet the criteria of hazardous waste if discarded

in its purchased form.

Waste from residues : Dispose of in accordance with local regulations.

Contaminated packaging : Dispose of as unused product.

Empty containers should be taken to an approved waste han-

dling site for recycling or disposal.

SECTION 14. TRANSPORT INFORMATION

International Regulation

UNRTDG

Not regulated as a dangerous good

IATA-DGR

Not regulated as a dangerous good

IMDG-Code

Not regulated as a dangerous good

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

Domestic regulation



SEALANT

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49 CFR

Not regulated as a dangerous good

SECTION 15. REGULATORY INFORMATION

EPCRA - Emergency Planning and Community Right-to-Know

CERCLA Reportable Quantity

Ingredients	CAS-No.	Component RQ	Calculated product RQ
		(lbs)	(lbs)
Methanol	67-56-1	5000	*

^{*:} Calculated RQ exceeds reasonably attainable upper limit.

SARA 304 Extremely Hazardous Substances Reportable Quantity

This material does not contain any components with a section 304 EHS RQ.

SARA 311/312 Hazards : Acute Health Hazard

SARA 302 : No chemicals in this material are subject to the reporting re-

quirements of SARA Title III, Section 302.

SARA 313 : This material does not contain any chemical components with

known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

US State Regulations

Pennsylvania Right To Know

Dimethyl siloxane, trimethoxysilyl-terminated	Not Assigned	30 - 50 %
Calcium carbonate	471-34-1	30 - 50 %
Dimethyl Siloxane, Dimethylvinylsiloxy- terminated	68083-19-2	5 - 10 %
Titanium dioxide	13463-67-7	1 - 5 %
Methanol	67-56-1	0.1 - 1 %

New Jersey Right To Know

Dimethyl siloxane, trimethoxysilyl-terminated	Not Assigned	30 - 50 %
Calcium carbonate	471-34-1	30 - 50 %
Dimethyl Siloxane, Dimethylvinylsiloxy-	68083-19-2	5 - 10 %
terminated		
Titanium dioxide	13463-67-7	1 - 5 %
Stearic acid	57-11-4	1 - 5 %
Methyltrimethoxysilane	1185-55-3	1 - 5 %
Methanol	67-56-1	0.1 - 1 %

California Prop 65 WARNING: This product contains a chemical known in the

State of California to cause birth defects or other reproductive

harm.

Methanol 67-56-1

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DOW CORNING

DOW CORNING(R) 748 NON-CORROSIVE SEALANT

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The ingredients of this product are reported in the following inventories:

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REACH : All ingredients (pre-)registered or exempt.

TSCA : All chemical substances in this material are included on or

exempted from listing on the TSCA Inventory of Chemical

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Substances.

AICS : All ingredients listed or exempt.

IECSC : All ingredients listed or exempt.

ENCS/ISHL : All components are listed on ENCS/ISHL or exempted from

inventory listing.

KECI : All ingredients listed, exempt or notified.

PICCS : All ingredients listed or exempt.

DSL : All chemical substances in this product comply with the CEPA

1999 and NSNR and are on or exempt from listing on the

Canadian Domestic Substances List (DSL).

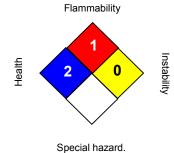
Inventories

AICS (Australia), DSL (Canada), IECSC (China), REACH (European Union), ENCS (Japan), ISHL (Japan), KECI (Korea), NZIoC (New Zealand), PICCS (Philippines), TCSI (Taiwan), TSCA (USA)

SECTION 16. OTHER INFORMATION

Further information

NFPA:



HMIS III:

HEALTH	2
FLAMMABILITY	1
PHYSICAL HAZARD	0

0 = not significant, 1 = Slight,

2 = Moderate, 3 = High

4 = Extreme, * = Chronic

Full text of other abbreviations

ACGIH : USA. ACGIH Threshold Limit Values (TLV)
ACGIH BEI : ACGIH - Biological Exposure Indices (BEI)

DCC OEL : Dow Corning Guide



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NIOSH REL : USA. NIOSH Recommended Exposure Limits

OSHA Z-1 : USA. Occupational Exposure Limits (OSHA) - Table Z-1 Lim-

its for Air Contaminants

ACGIH / TWA : 8-hour, time-weighted average ACGIH / STEL : Short-term exposure limit : Time weighted average

NIOSH REL / TWA : Time-weighted average concentration for up to a 10-hour

workday during a 40-hour workweek

NIOSH REL / ST : STEL - 15-minute TWA exposure that should not be exceeded

at any time during a workday

OSHA Z-1 / TWA : 8-hour time weighted average

Sources of key data used to compile the Material Safety

Data Sheet

: Internal technical data, data from raw material SDSs, OECD eChem Portal search results and European Chemicals Agen-

cy, http://echa.europa.eu/

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Items where changes have been made to the previous version are highlighted in the body of this document by two vertical lines.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and shall not be considered a warranty or quality specification of any type. The information provided relates only to the specific material identified at the top of this SDS and may not be valid when the SDS material is used in combination with any other materials or in any process, unless specified in the text. Material users should review the information and recommendations in the specific context of their intended manner of handling, use, processing and storage, including an assessment of the appropriateness of the SDS material in the user's end product, if applicable.

US / Z8