

# **SAFETY DATA SHEET**

# **DOW SILICONES CORPORATION**

Product name: DOWSIL™ EA-7100 Adhesive Issue Date: 07/23/2020 Print Date: 01/15/2021

DOW SILICONES CORPORATION encourages and expects you to read and understand the entire (M)SDS, as there is important information throughout the document. We expect you to follow the precautions identified in this document unless your use conditions would necessitate other appropriate methods or actions.

## 1. IDENTIFICATION

Product name: DOWSIL™ EA-7100 Adhesive

Recommended use of the chemical and restrictions on use

Identified uses: Adhesive, binding agents

**COMPANY IDENTIFICATION** 

DOW SILICONES CORPORATION 2200 WEST SALZBURG ROAD MIDLAND MI 48686-0994 UNITED STATES

Customer Information Number: 800-258-2436

SDSQuestion@dow.com

**EMERGENCY TELEPHONE NUMBER** 

**24-Hour Emergency Contact:** 1 800 424 9300 **Local Emergency Contact:** 800-424-9300

## 2. HAZARDS IDENTIFICATION

## **Hazard classification**

GHS classification in accordance with 29 CFR 1910.1200 Skin sensitisation - Category 1 Carcinogenicity - Category 2

# Label elements Hazard pictograms





Signal word: WARNING!

#### **Hazards**

May cause an allergic skin reaction.

Suspected of causing cancer.

## **Precautionary statements**

#### Prevention

Obtain special instructions before use.

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

Keep away from heat/ sparks/ open flames/ hot surfaces. No smoking.

Keep only in original container.

Avoid breathing dust/ fume/ gas/ mist/ vapours/ spray.

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

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

#### Response

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

IF exposed or concerned: Get medical advice/ attention.

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

Wash contaminated clothing before reuse.

# **Storage**

Store in a well-ventilated place.

Store locked up.

## **Disposal**

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

#### Other hazards

May generate flammable hydrogen gas. Avoid contact with water, alcohols, acidic, basic, or oxidizing materials.

# 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical nature: Silicone with organic ingredients

This product is a mixture.

Component	CASRN	Concentration
3-Trimethoxysilylpropyl methacrylate	2530-85-0	>= 1.0 - <= 4.0 %
Isobutyl trimethoxysilane	18395-30-7	>= 0.95 - <= 4.0 %
Octamethyltrisiloxane	107-51-7	>= 2.76 - <= 3.06 %
Dibenzoyl peroxide	94-36-0	>= 0.5 - <= 2.5 %
Magnesium Oxide	1309-48-4	>= 0.36 - <= 1.08 %
Silane, trimethoxy[2-(7-oxabicyclo[4.1.0]hept-3-yl)ethyl]-	3388-04-3	>= 0.1 - <= 0.99 %

Allyl Methacrylate	96-05-9	>= 0.42 - <= 0.56 %
benzothiazole-2-thiol	149-30-4	>= 0.01 - <= 0.5 %
Diallyl maleate	999-21-3	>= 0.084 - <= 0.112 %

## 4. FIRST AID MEASURES

# Description of first aid measures General advice:

First Aid responders should pay attention to self-protection and use the recommended protective clothing (chemical resistant gloves, splash protection). If potential for exposure exists refer to Section 8 for specific personal protective equipment.

**Inhalation:** Move person to fresh air and keep comfortable for breathing; consult a physician.

**Skin contact:** Remove material from skin immediately by washing with soap and plenty of water. Remove contaminated clothing and shoes while washing. Seek medical attention if irritation or rash occurs. Wash clothing before reuse. Discard items which cannot be decontaminated, including leather articles such as shoes, belts and watchbands. Suitable emergency safety shower facility should be available in work area.

**Eye contact:** Flush eyes thoroughly with water for several minutes. Remove contact lenses after the initial 1-2 minutes and continue flushing for several additional minutes. If effects occur, consult a physician, preferably an ophthalmologist.

**Ingestion:** Rinse mouth with water. No emergency medical treatment necessary.

#### Most important symptoms and effects, both acute and delayed:

Aside from the information found under Description of first aid measures (above) and Indication of immediate medical attention and special treatment needed (below), any additional important symptoms and effects are described in Section 11: Toxicology Information.

Indication of any immediate medical attention and special treatment needed

**Notes to physician:** No specific antidote. Treatment of exposure should be directed at the control of symptoms and the clinical condition of the patient.

## 5. FIREFIGHTING MEASURES

# **Extinguishing media**

Suitable extinguishing media: Water spray. Alcohol-resistant foam. Carbon dioxide (CO2).

Unsuitable extinguishing media: Dry chemical.

Special hazards arising from the substance or mixture

Hazardous combustion products: Silicon oxides. Formaldehyde. Carbon oxides.

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**Unusual Fire and Explosion Hazards:** Applying foam will release significant amounts of hydrogen gas that can be trapped under the foam blanket.. Exposure to combustion products may be a hazard to health.. Fire burns more vigorously than would be expected..

## Advice for firefighters

**Fire Fighting Procedures:** Use water spray to cool unopened containers.. Evacuate area.. 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.. Contain fire water run-off if possible. Fire water run-off, if not contained, may cause environmental damage..

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Do not allow extinguishing medium to contact container contents. Most fire extinguishing media will cause hydrogen evolution, and once the fire is put out, may accumulate in poorly ventilated or confined areas and result in flash fire or explosion if ignited. Remove undamaged containers from fire area if it is safe to do so.

**Special protective equipment for firefighters:** In the event of fire, wear self-contained breathing apparatus.. Use personal protective equipment..

## 6. ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures:** Remove all sources of ignition. Use personal protective equipment. Follow safe handling advice and personal protective equipment recommendations.

**Environmental precautions:** Do not release the product to the aquatic environment above defined regulatory levels. 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: Wipe up or scrape up and contain for salvage or disposal. 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 determine which regulations are applicable. For large spills, provide dyking or other appropriate containment to keep material from spreading. If dyked material can be pumped, store recovered material in appropriate container. Materials in contact with water, moisture, acids or bases have the potential to generate hydrogen gas. Recovered material should bestored in a vented container. Dispose of saturated absorbent or cleaning materials appropriately, since spontaneous heating may occur. Recovered material should be stored in a vented container. The vent must prevent the ingress of water as further reaction with spilled materials can take place which could lead to overpressurization of the container.

See sections: 7, 8, 11, 12 and 13.

# 7. HANDLING AND STORAGE

Precautions for safe handling: Do not get on skin or clothing. Avoid contact with eyes. Do not swallow. Keep away from water. Protect from moisture. Take care to prevent spills, waste and minimize release to the environment. Handle in accordance with good industrial hygiene and safety practice. CONTAINERS MAY BE HAZARDOUS WHEN EMPTY. Since emptied containers retain product residue follow all (M)SDS and label warnings even after container is emptied. Use only with adequate ventilation. See Engineering measures under EXPOSURE CONTROLS/PERSONAL PROTECTION section.

**Conditions for safe storage:** Keep in properly labelled containers. Store in original container. Store locked up. Store in accordance with the particular national regulations. Product may evolve minute quantities of flammable hydrogen gas which can accumulate. Adequately ventilate to maintain vapors well below flammability limits and exposure guidelines. Do not repackage. Clogged container vents may increase pressure build up. Store in a closed container.

Do not store with the following product types: Strong oxidizing agents. Unsuitable materials for containers: Do not store in or use containers except the original product package.

# 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

## **Control parameters**

If exposure limits exist, they are listed below. If no exposure limits are displayed, then no values are applicable.

Component	Regulation	Type of listing	Value	
3-Trimethoxysilylpropyl	Dow IHG	TWA Aerosol	0.1 mg/m3	
methacrylate				
Octamethyltrisiloxane	Dow IHG	TWA	20 ppm	
Dibenzoyl peroxide	Dow IHG	TWA	5 mg/m3	
	Dow IHG	STEL	10 mg/m3	
	ACGIH	TWA	5 mg/m3	
	Further information: A4: Not	classifiable as a human card	cinogen	
	OSHA Z-1	TWA	5 mg/m3	
	CAL PEL	PEL	5 mg/m3	
	OSHA P0	TWA	5 mg/m3	
Magnesium Oxide	ACGIH	TWA Inhalable	10 mg/m3	
particulate matter				
	Further information: A4: Not classifiable as a human carcinogen			
	OSHA Z-1 TWA fume, total 15 m		15 mg/m3	
	particulate			
Allyl Methacrylate	Dow IHG	TWA	0.2 ppm	
	Further information: SKIN: Absorbed via skin			
	ACGIH TWA 1 ppm		1 ppm	
	Further information: Skin: Danger of cutaneous absorption			
benzothiazole-2-thiol	US WEEL TWA 5 mg/n			
	Further information: Skin; DSEN: Dermal Sensitization Notation			
Methanol	ACGIH	TWA	200 ppm	
	Further information: Skin: Danger of cutaneous absorption			
	ACGIH STEL 250 ppm			
Further information: Skin: Danger of cutaneous absorption				

	OSHA Z-1	TWA	260 mg/m3 200 ppm	
Benzene	ACGIH	TWA	0.5 ppm	
	Further information: A1: Co absorption	Further information: A1: Confirmed human carcinogen; Skin: Danger of cutaneous		
	ACGIH	STEL	2.5 ppm	
	Further information: A1: Co absorption	Further information: A1: Confirmed human carcinogen; Skin: Danger of cutaneous		
	OSHA CARC	PEL	1 ppm	
	Further information: OSHA	specifically regulated carcino		
	OSHA CARC	STEL	5 ppm	
	Further information: OSHA specifically regulated carcinogen			
	OSHA Z-2	TWA	10 ppm	
	OSHA Z-2	CEIL	25 ppm	
	OSHA Z-2	Peak	50 ppm	
	OSHA P0		See Further information	
	operations or sectors exclu- 1910.1028 applies to all occursive subsegments of industry which distribution and sale of fuels gas drilling and production,	Further information: See 1910.1028. See Table Z-2 for the limits applicable in the operations or sectors excluded in 1910.1028; d: The final benzene standard in 1910.1028 applies to all occupational exposures to benzene except some subsegments of industry where exposures are consistently under the action level (i.e., distribution and sale of fuels, sealed containers and pipelines, coke production, oil and gas drilling and production, natural gas processing, and the percentage exclusion for liquid mixtures); for the excepted subsegments, the benzene limits in Table Z-2 apply.		

The following substance(s), which have Occupational Exposure Limit(s) (OEL), may be formed during handling or processing:, Methanol., Benzene

Biological occupational exposure limits

Components	CAS-No.	Control parameters	Biological specimen	Sampling time	Permissible concentration	Basis
Methanol	67-56-1	Methanol	Urine	End of shift (As	15 mg/l	ACGIH BEI
				soon as		
				possible after		
				exposure ceases)		
Benzene	71-43-2	S- Phenylmerc apturic acid	Urine	End of shift (As soon as possible after exposure ceases)	25 μg/g creatinine	ACGIH BEI
		t,t-Muconic acid	Urine	End of shift (As soon as possible after exposure ceases)	500 μg/g creatinine	ACGIH BEI

## **Exposure controls**

**Engineering controls:** Use local exhaust ventilation, or other engineering controls to maintain airborne levels below exposure limit requirements or guidelines. If there are no applicable exposure

limit requirements or guidelines, general ventilation should be sufficient for most operations. Local exhaust ventilation may be necessary for some operations.

## Individual protection measures

**Eye/face protection:** Use safety glasses (with side shields). If exposure causes eye discomfort, use a full-face respirator.

#### Skin protection

Hand protection: Use gloves chemically resistant to this material. Examples of preferred glove barrier materials include: Butyl rubber. Neoprene. Nitrile/butadiene rubber ("nitrile" or "NBR"). Ethyl vinyl alcohol laminate ("EVAL"). Polyvinyl alcohol ("PVA"). Polyvinyl chloride ("PVC" or "vinyl"). Viton. Examples of acceptable glove barrier materials include: Natural rubber ("latex"). NOTICE: The selection of a specific glove for a particular application and duration of use in a workplace should also take into account all relevant workplace factors such as, but not limited to: Other chemicals which may be handled, physical requirements (cut/puncture protection, dexterity, thermal protection), potential body reactions to glove materials, as well as the instructions/specifications provided by the glove supplier.

**Other protection:** Use protective clothing chemically resistant to this material. Selection of specific items such as face shield, boots, apron, or full body suit will depend on the task.

**Respiratory protection:** Respiratory protection should be worn when there is a potential to exceed the exposure limit requirements or guidelines. If there are no applicable exposure limit requirements or guidelines, use an approved respirator. When respiratory protection is required, use an approved positive-pressure self-contained breathing apparatus or positive-pressure airline with auxiliary self-contained air supply.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**Appearance** 

Physical state paste
Color grey

Odor not significant
Odor Threshold No data available
pH Not applicable
Melting point/range No data available
Freezing point No data available
Boiling point (760 mmHg) Not applicable

Flash point Seta closed cup 76 °C (169 °F)

**Evaporation Rate (Butyl Acetate** 

= 1)

Not applicable

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

Lower explosion limitNo data availableUpper explosion limitNo data availableVapor PressureNot applicableRelative Vapor Density (air = 1)No data available

Relative Density (water = 1) 1.09

Water solubility No data available

**Product name: DOWSIL™ EA-7100 Adhesive** 

Partition coefficient: n- No o

octanol/water

No data available

Auto-ignition temperature

Decomposition temperature

Dynamic Viscosity

Kinematic Viscosity

Explosive properties

No data available

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

Molecular weightNo data availableParticle sizeNo data available

NOTE: The physical data presented above are typical values and should not be construed as a specification.

# 10. STABILITY AND REACTIVITY

Reactivity: Not classified as a reactivity hazard.

Chemical stability: Stable under normal conditions.

**Possibility of hazardous reactions:** Can react with strong oxidizing agents. When heated to temperatures above 150 °C (300 °F) in the presence of air, product can form formaldehyde vapours. Safe handling conditions may be maintained by keeping vapour concentrations within the occupational exposure limit for formaldehyde. Vapours may form explosive mixture with air. Product may evolve flammable hydrogen gas on contact with water, alcohols, acidic or basic materials, many metals or metallic compounds and can form explosive mixtures in air. Hazardous decomposition products will be formed at elevated temperatures.

Conditions to avoid: Exposure to moisture

**Incompatible materials:** Oxidizing agents

#### Hazardous decomposition products:

Decomposition products can include and are not limited to: Formaldehyde. Methanol. Benzoic acid. Benzene. Phenyl benzoate.

## 11. TOXICOLOGICAL INFORMATION

Toxicological information appears in this section when such data is available.

## Information on likely routes of exposure

Eye contact, Skin contact, Ingestion.

Acute toxicity (represents short term exposures with immediate effects - no chronic/delayed effects known unless otherwise noted)

**Acute oral toxicity** 

Very low toxicity if swallowed. Harmful effects not anticipated from swallowing small amounts. Contains component(s) which have been reported to cause effects on the following organs in animals: Kidney. Liver.

Based on information for component(s):

LD50, > 5,000 mg/kg Estimated.

As product: Single dose oral LD50 has not been determined.

#### Information for components:

#### 3-Trimethoxysilylpropyl methacrylate

LD50, Rat, male and female, > 2,000 mg/kg No deaths occurred at this concentration.

#### Isobutyl trimethoxysilane

LD50, Rat, male and female, > 2,000 mg/kg No deaths occurred at this concentration.

## Octamethyltrisiloxane

LD50, Rat, female, > 2,000 mg/kg No deaths occurred at this concentration.

## **Dibenzoyl peroxide**

LD50, Mouse, > 2,000 mg/kg No deaths occurred at this concentration.

## **Magnesium Oxide**

LD50, Rat, 3,990 mg/kg

#### Silane, trimethoxy[2-(7-oxabicyclo[4.1.0]hept-3-yl)ethyl]-

LD50, Rat, male, 13,161 mg/kg OECD Test Guideline 401

## **Allyl Methacrylate**

LD50, Rat, 470 mg/kg

#### benzothiazole-2-thiol

LD50, Rat, > 2,830 mg/kg

#### Diallyl maleate

LD50, Rat, 300 mg/kg

#### Acute dermal toxicity

Prolonged skin contact is unlikely to result in absorption of harmful amounts.

Based on information for component(s):

LD50, > 2,000 mg/kg Estimated.

As product: The dermal LD50 has not been determined.

#### Information for components:

## 3-Trimethoxysilylpropyl methacrylate

LD50, Rat, male and female, > 2,000 mg/kg OECD 402 or equivalent No deaths occurred at this concentration.

## Isobutyl trimethoxysilane

The dermal LD50 has not been determined.

#### Octamethyltrisiloxane

LD50, Rat, male and female, > 2,000 mg/kg No deaths occurred at this concentration.

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#### Dibenzoyl peroxide

The dermal LD50 has not been determined.

## **Magnesium Oxide**

The dermal LD50 has not been determined.

## Silane, trimethoxy[2-(7-oxabicyclo[4.1.0]hept-3-yl)ethyl]-

LD50, Rabbit, male, 6,741 mg/kg OECD Test Guideline 402

## **Allyl Methacrylate**

LD50, Rabbit, 467 mg/kg

## benzothiazole-2-thiol

LD50, Rabbit, > 7,940 mg/kg

#### **Diallyl maleate**

LD50, Rabbit, 1,150 mg/kg

## Acute inhalation toxicity

Brief exposure (minutes) is not likely to cause adverse effects. Vapor from heated material may cause respiratory irritation. Excessive exposure may cause: Central nervous system depression

As product: The LC50 has not been determined.

# Information for components:

## 3-Trimethoxysilylpropyl methacrylate

LC50, Rat, male and female, 4 Hour, dust/mist, > 2.28 mg/l OECD Test Guideline 403 No deaths occurred at this concentration.

#### **Isobutyl trimethoxysilane**

LC50, Rat, 4 Hour, vapour, > 1525 ppm No deaths occurred at this concentration.

## Octamethyltrisiloxane

LC50, Rat, male and female, 4 Hour, vapour, > 22.6 mg/l No deaths occurred at this concentration.

## **Dibenzoyl peroxide**

Dust may cause irritation to upper respiratory tract (nose and throat).

LC0, Rat, 4 Hour, dust/mist, 24.3 mg/l

#### **Magnesium Oxide**

The LC50 has not been determined.

## Silane, trimethoxy[2-(7-oxabicyclo[4.1.0]hept-3-yl)ethyl]-

The LC50 has not been determined.

## **Allyl Methacrylate**

LC50, Rat, 4 Hour, vapour, 1.47 mg/l OECD Test Guideline 403

#### benzothiazole-2-thiol

LC50, Rat, 4 Hour, dust/mist, > 1.27 mg/l No deaths occurred at this concentration.

#### Diallyl maleate

LC50, Rat, 8 Hour, vapour, 0.1203 mg/l No deaths occurred following exposure to a saturated atmosphere.

#### Skin corrosion/irritation

Based on information for component(s):

Brief contact may cause slight skin irritation with local redness.

## Information for components:

## 3-Trimethoxysilylpropyl methacrylate

Brief contact may cause slight skin irritation with local redness.

## **Isobutyl trimethoxysilane**

Brief contact may cause moderate skin irritation with local redness.

#### Octamethyltrisiloxane

Brief contact is essentially nonirritating to skin.

## Dibenzoyl peroxide

Prolonged contact may cause slight skin irritation with local redness.

#### **Magnesium Oxide**

Prolonged exposure not likely to cause significant skin irritation.

## Silane, trimethoxy[2-(7-oxabicyclo[4.1.0]hept-3-yl)ethyl]-

Brief contact is essentially nonirritating to skin.

#### **Allyl Methacrylate**

Prolonged exposure not likely to cause significant skin irritation.

#### benzothiazole-2-thiol

Essentially nonirritating to skin.

## **Diallyl maleate**

Brief contact may cause skin irritation with local redness.

## Serious eye damage/eye irritation

Based on information for component(s):

May cause slight eye irritation.

May cause mild eye discomfort.

Vapor may cause eye irritation experienced as mild discomfort and redness.

#### Information for components:

# 3-Trimethoxysilylpropyl methacrylate

May cause slight eye irritation.

Corneal injury is unlikely.

#### Isobutyl trimethoxysilane

May cause slight eye irritation.

Corneal injury is unlikely.

## Octamethyltrisiloxane

May cause slight temporary eye irritation.

Corneal injury is unlikely.

#### Dibenzoyl peroxide

May cause slight eye irritation.

May cause slight temporary corneal injury.

Effects are likely to heal readily.

## **Magnesium Oxide**

May cause slight eye irritation.

Vapor or dust may cause eye irritation.

# Silane, trimethoxy[2-(7-oxabicyclo[4.1.0]hept-3-yl)ethyl]-

May cause slight eye irritation.

Corneal injury is unlikely.

#### Allyl Methacrylate

May cause slight temporary eye irritation.

Corneal injury is unlikely.

Vapor may cause eye irritation experienced as mild discomfort and redness.

Vapor may cause lacrimation (tears).

## benzothiazole-2-thiol

May cause slight eye irritation.

#### **Diallyl maleate**

May cause eye irritation.

May cause slight corneal injury.

## Sensitization

For skin sensitization:

A component in this mixture has been shown to be a skin sensitizer.

For respiratory sensitization:

No relevant data found.

#### Information for components:

# 3-Trimethoxysilylpropyl methacrylate

For skin sensitization:

Did not demonstrate the potential for contact allergy in mice.

For respiratory sensitization:

No relevant data found.

#### Isobutyl trimethoxysilane

Did not cause allergic skin reactions when tested in guinea pigs.

For respiratory sensitization:

No relevant data found.

#### Octamethyltrisiloxane

Did not cause allergic skin reactions when tested in guinea pigs.

For respiratory sensitization:

No relevant data found.

## Dibenzoyl peroxide

Skin contact may cause an allergic skin reaction.

For respiratory sensitization:

No relevant data found.

#### **Magnesium Oxide**

For skin sensitization:

No relevant data found.

For respiratory sensitization:

No relevant data found.

#### Silane, trimethoxy[2-(7-oxabicyclo[4.1.0]hept-3-yl)ethyl]-

Has caused allergic skin reactions when tested in guinea pigs.

For respiratory sensitization:

No relevant data found.

#### Allyl Methacrylate

Did not cause allergic skin reactions when tested in guinea pigs.

For respiratory sensitization:

No relevant data found.

#### benzothiazole-2-thiol

Has caused allergic skin reactions in humans.

Has caused allergic skin reactions when tested in guinea pigs.

#### **Diallyl maleate**

Has caused allergic skin reactions when tested in guinea pigs.

For respiratory sensitization:

No relevant data found.

# **Specific Target Organ Systemic Toxicity (Single Exposure)**

Contains component(s) which are classified as specific target organ toxicant, single exposure, category 3.

#### Information for components:

## 3-Trimethoxysilylpropyl methacrylate

Evaluation of available data suggests that this material is not an STOT-SE toxicant.

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## **Isobutyl trimethoxysilane**

May cause drowsiness or dizziness. Route of Exposure: inhalation (vapour) Target Organs: Central nervous system

#### Octamethyltrisiloxane

Evaluation of available data suggests that this material is not an STOT-SE toxicant.

## **Dibenzoyl peroxide**

Evaluation of available data suggests that this material is not an STOT-SE toxicant.

## **Magnesium Oxide**

Evaluation of available data suggests that this material is not an STOT-SE toxicant.

## Silane, trimethoxy[2-(7-oxabicyclo[4.1.0]hept-3-yl)ethyl]-

Evaluation of available data suggests that this material is not an STOT-SE toxicant.

#### **Allyl Methacrylate**

Available data are inadequate to determine single exposure specific target organ toxicity.

#### benzothiazole-2-thiol

Evaluation of available data suggests that this material is not an STOT-SE toxicant.

#### **Diallyl maleate**

May cause respiratory irritation. Route of Exposure: Inhalation

Target Organs: respiratory tract irritation

#### **Aspiration Hazard**

Based on physical properties, not likely to be an aspiration hazard.

# Information for components:

#### 3-Trimethoxysilylpropyl methacrylate

Based on available information, aspiration hazard could not be determined.

#### Isobutyl trimethoxysilane

Aspiration into the lungs may occur during ingestion or vomiting, causing lung damage or even death due to chemical pneumonia.

## Octamethyltrisiloxane

Based on available information, aspiration hazard could not be determined.

#### **Magnesium Oxide**

Based on physical properties, not likely to be an aspiration hazard.

#### Silane, trimethoxy[2-(7-oxabicyclo[4.1.0]hept-3-yl)ethyl]-

Based on physical properties, not likely to be an aspiration hazard.

#### **Allyl Methacrylate**

Aspiration into the lungs may occur during ingestion or vomiting, causing tissue damage or lung injury.

## benzothiazole-2-thiol

Based on physical properties, not likely to be an aspiration hazard.

#### **Diallyl maleate**

Based on available information, aspiration hazard could not be determined.

Chronic toxicity (represents longer term exposures with repeated dose resulting in chronic/delayed effects - no immediate effects known unless otherwise noted)

## Specific Target Organ Systemic Toxicity (Repeated Exposure)

Contains component(s) which have been reported to cause effects on the following organs in animals: Liver

This material contains octamethyltrisiloxane (L3). Repeated inhalation exposure in rats to L3 resulted in protoporphyrin accumulation in the liver. Without knowledge of the specific mechanism leading to the protoporphyrin accumulation the relevance of this finding to humans is unknown.

Limited data from a single animal study suggested that repeated, excessive oral doses of magnesium oxide produced systemic effects including gastrointestinal disturbances and possibly testicular effects.

## Information for components:

## 3-Trimethoxysilylpropyl methacrylate

Based on available data, repeated exposures are not anticipated to cause significant adverse effects.

#### Isobutyl trimethoxysilane

Based on available data, repeated exposures are not anticipated to cause significant adverse effects.

## Octamethyltrisiloxane

In animals, effects have been reported on the following organs:

Liver

This material contains octamethyltrisiloxane (L3). Repeated inhalation exposure in rats to L3 resulted in protoporphyrin accumulation in the liver. Without knowledge of the specific mechanism leading to the protoporphyrin accumulation the relevance of this finding to humans is unknown.

#### DibenzovI peroxide

Repeated excessive exposure may cause irritation of the upper respiratory tract. Based on available data, repeated exposures are not anticipated to cause significant adverse effects.

## **Magnesium Oxide**

Limited data from a single animal study suggested that repeated, excessive oral doses of magnesium oxide produced systemic effects including gastrointestinal disturbances and possibly testicular effects.

# Silane, trimethoxy[2-(7-oxabicyclo[4.1.0]hept-3-yl)ethyl]-

Based on available data, repeated exposures are not anticipated to cause significant adverse effects.

#### **Allyl Methacrylate**

In animals, effects have been reported on the following organs: Kidney.

Liver.

Excessive exposure may cause severe irritation to the upper respiratory tract (nose and throat).

## benzothiazole-2-thiol

Based on available data, repeated exposures to small amounts are not anticipated to cause significant adverse effects.

#### **Diallyl maleate**

No relevant data found.

#### Carcinogenicity

Contains component(s) which have caused cancer in laboratory animals.

## Information for components:

## 3-Trimethoxysilylpropyl methacrylate

No relevant data found.

#### Isobutyl trimethoxysilane

No relevant data found.

## **Octamethyltrisiloxane**

Did not cause cancer in laboratory animals.

## **Dibenzoyl peroxide**

Did not cause cancer in laboratory animals.

## **Magnesium Oxide**

Available data are inadequate to evaluate carcinogenicity.

# Silane, trimethoxy[2-(7-oxabicyclo[4.1.0]hept-3-yl)ethyl]-

Has caused cancer in laboratory animals.

#### **Allyl Methacrylate**

No relevant data found.

#### benzothiazole-2-thiol

Has caused cancer in laboratory animals.

#### **Diallyl maleate**

No relevant data found.

# Carcinogenicity

Component List Classification

benzothiazole-2-thiol IARC Group 2A: Probably carcinogenic to

humans

## **Teratogenicity**

Contains component(s) which caused birth defects in laboratory animals only at doses toxic to the mother.

## Information for components:

# 3-Trimethoxysilylpropyl methacrylate

Has caused birth defects in laboratory animals only at doses toxic to the mother.

## **Isobutyl trimethoxysilane**

Did not cause birth defects or any other fetal effects in laboratory animals.

## **Octamethyltrisiloxane**

Did not cause birth defects or any other fetal effects in laboratory animals.

# **Dibenzoyl peroxide**

Did not cause birth defects in laboratory animals.

## **Magnesium Oxide**

No relevant data found.

## Silane, trimethoxy[2-(7-oxabicyclo[4.1.0]hept-3-yl)ethyl]-

Did not cause birth defects or other effects in the fetus even at doses which caused toxic effects in the mother.

## Allyl Methacrylate

Did not cause birth defects or any other fetal effects in laboratory animals.

## benzothiazole-2-thiol

Has been toxic to the fetus in laboratory animals at doses toxic to the mother.

#### Diallyl maleate

No relevant data found.

#### Reproductive toxicity

Contains component(s) which did not interfere with reproduction in animal studies.

# Information for components:

#### 3-Trimethoxysilylpropyl methacrylate

No relevant data found.

#### Isobutyl trimethoxysilane

In animal studies, did not interfere with reproduction.

#### Octamethyltrisiloxane

In animal studies, did not interfere with fertility. In animal studies, did not interfere with reproduction.

#### Dibenzoyl peroxide

In animal studies, did not interfere with fertility. In animal studies, did not interfere with reproduction.

#### **Magnesium Oxide**

No relevant data found.

#### Silane, trimethoxy[2-(7-oxabicyclo[4.1.0]hept-3-yl)ethyl]-

In animal studies, did not interfere with reproduction. In animal studies, did not interfere with fertility.

## **Allyl Methacrylate**

In animal studies, did not interfere with reproduction.

#### benzothiazole-2-thiol

In animal studies, did not interfere with reproduction.

#### **Diallyl maleate**

No relevant data found.

## Mutagenicity

Contains component(s) which were negative in some in vitro genetic toxicity studies and positive in others. Genetic toxicity studies in animals were negative for component(s) tested.

## Information for components:

## 3-Trimethoxysilylpropyl methacrylate

In vitro genetic toxicity studies were negative in some cases and positive in other cases. Animal genetic toxicity studies were negative.

#### Isobutyl trimethoxysilane

In vitro genetic toxicity studies were negative. Animal genetic toxicity studies were negative.

## Octamethyltrisiloxane

In vitro genetic toxicity studies were negative. Animal genetic toxicity studies were negative.

## **Dibenzoyl peroxide**

In vitro genetic toxicity studies were negative. Animal genetic toxicity studies were negative.

## **Magnesium Oxide**

This material was not mutagenic in an Ames bacterial assay.

# Silane, trimethoxy[2-(7-oxabicyclo[4.1.0]hept-3-yl)ethyl]-

In vitro genetic toxicity studies were positive.

#### **Allyl Methacrylate**

In vitro genetic toxicity studies were negative. Animal genetic toxicity studies were negative.

#### benzothiazole-2-thiol

In vitro genetic toxicity studies were negative. Animal genetic toxicity studies were negative.

#### **Diallyl maleate**

No relevant data found.

## 12. ECOLOGICAL INFORMATION

Ecotoxicological information appears in this section when such data is available.

## **Toxicity**

## 3-Trimethoxysilylpropyl methacrylate

# Acute toxicity to fish

Material is practically non-toxic to aquatic organisms on an acute basis (LC50/EC50/EL50/LL50 >100 mg/L in the most sensitive species tested).

LC50, Brachydanio rerio (zebrafish), semi-static test, 96 Hour, > 1,042 mg/l, Directive 67/548/EEC, Annex V, C.1.

## Acute toxicity to aquatic invertebrates

LC50, Daphnia magna (Water flea), static test, 48 Hour, > 876 mg/l, Directive 67/548/EEC, Annex V, C.2.

## Acute toxicity to algae/aquatic plants

ErC50, Desmodesmus subspicatus (green algae), static test, 72 Hour, Growth rate, > 100 mg/l, Directive 67/548/EEC, Annex V, C.3.

NOEC, Desmodesmus subspicatus (green algae), static test, 72 Hour, Growth rate, > 100 mg/l, Directive 67/548/EEC, Annex V, C.3.

## Toxicity to bacteria

EC50, activated sludge, 3 Hour, Respiration rates., > 1,000 mg/l, OECD Test Guideline 209

## Isobutyl trimethoxysilane

## Acute toxicity to fish

Material is practically non-toxic to aquatic organisms on an acute basis (LC50/EC50/EL50/LL50 >100 mg/L in the most sensitive species tested). LC50, Danio rerio (zebra fish), 96 Hour, > 100 mg/l

## Acute toxicity to aquatic invertebrates

EC50, Daphnia sp. (water flea), 48 Hour, > 864 mg/l

## Acute toxicity to algae/aquatic plants

NOEC, Scenedesmus subspicatus, 72 Hour, Growth rate, 220 mg/l ErC50, Scenedesmus subspicatus, 72 Hour, Growth rate, > 1,170 mg/l

## Octamethyltrisiloxane

# Acute toxicity to fish

Not expected to be acutely toxic to aquatic organisms.

No toxicity at the limit of solubility

LC50, Oncorhynchus mykiss (rainbow trout), flow-through test, 96 Hour, > 0.0191 mg/l, OECD Test Guideline 203

#### Acute toxicity to aquatic invertebrates

No toxicity at the limit of solubility

EC50, Daphnia magna (Water flea), flow-through test, 48 Hour, > 0.02 mg/l, OECD Test Guideline 202

# Acute toxicity to algae/aquatic plants

No toxicity at the limit of solubility

EC50, Pseudokirchneriella subcapitata (green algae), static test, 72 Hour, Growth rate inhibition, > 0.0094 mg/l, OECD Test Guideline 201

#### Toxicity to bacteria

For similar material(s):

EC50, activated sludge, static test, 3 Hour, Respiration rates., > 100 mg/l, OECD Test Guideline 209

## Chronic toxicity to fish

No toxicity at the limit of solubility

NOEC, Oncorhynchus mykiss (rainbow trout), 90 d, > 0.027 mg/l

## Chronic toxicity to aquatic invertebrates

No toxicity at the limit of solubility

NOEC, Daphnia magna (Water flea), flow-through test, 21 d, > 0.015 mg/l

## Dibenzoyl peroxide

#### Acute toxicity to fish

Material is very highly toxic to aquatic organisms on an acute basis (LC50/EC50 <0.1 mg/L in the most sensitive species).

LC50, Pimephales promelas (fathead minnow), 2.8 mg/l

LC50, Oncorhynchus mykiss (rainbow trout), semi-static test, 96 Hour, 0.0602 mg/l, OECD Test Guideline 203 or Equivalent

## Acute toxicity to aquatic invertebrates

EC50, Daphnia magna (Water flea), static test, 48 Hour, 0.11 mg/l, OECD Test Guideline 202 or Equivalent

## Acute toxicity to algae/aquatic plants

ErC50, Pseudokirchneriella subcapitata (green algae), static test, 72 Hour, Other, 0.0711 mg/l

## Toxicity to bacteria

EC50, 0.5 Hour, 35 mg/l, OECD Test Guideline 209

## Chronic toxicity to aquatic invertebrates

EC10, Daphnia magna (Water flea), 21 d, 0.001 mg/l

## **Magnesium Oxide**

## Acute toxicity to aquatic invertebrates

Material is practically non-toxic to aquatic organisms on an acute basis

(LC50/EC50/EL50/LL50 >100 mg/L in the most sensitive species tested).

Based on data from similar materials

EC50, Daphnia magna (Water flea), 48 Hour, 548.4 mg/l

#### Acute toxicity to algae/aquatic plants

Based on data from similar materials

EC50, Desmodesmus subspicatus (green algae), 72 Hour, > 100 mg/l, OECD Test Guideline 201

# Toxicity to bacteria

Based on data from similar materials

EC50, 3 Hour, > 900 mg/l, OECD Test Guideline 209

#### Chronic toxicity to aquatic invertebrates

Based on data from similar materials

NOEC, Daphnia magna (Water flea), 21 d, 321 mg/l

#### Silane, trimethoxy[2-(7-oxabicyclo[4.1.0]hept-3-yl)ethyl]-

## Acute toxicity to fish

For similar material(s):

Material is slightly toxic to aquatic organisms on an acute basis (LC50/EC50 between 10 and 100 mg/L in the most sensitive species tested).

LC50, Oncorhynchus mykiss (rainbow trout), Static, 96 Hour, 180 mg/l, OECD Test Guideline 203

## Acute toxicity to aquatic invertebrates

For similar material(s):

EC50, Daphnia magna (Water flea), Static, 48 Hour, 20 mg/l, OECD Test Guideline 202

## Acute toxicity to algae/aquatic plants

Based on data from similar materials

No toxicity at the limit of solubility

ErC50, Scenedesmus subspicatus, Static, 72 Hour, > 32 mg/l, OECD Test Guideline 201 NOEC, Scenedesmus subspicatus, Static, 72 Hour, 3.2 mg/l, OECD Test Guideline 201

#### Toxicity to bacteria

IC50, activated sludge, Static, 30 min, Respiration rates., > 100 mg/l, OECD Test Guideline 209

#### Allyl Methacrylate

## Acute toxicity to fish

Material is highly toxic to aquatic organisms on an acute basis (LC50/EC50 between 0.1 and 1 mg/L in the most sensitive species tested).

LC50, Pimephales promelas (fathead minnow), 96 Hour, 0.61 mg/l, Tested according to Directive 92/69/EEC.

## Acute toxicity to aquatic invertebrates

EC50, Daphnia magna (Water flea), 48 Hour, 2.4 mg/l, OECD Test Guideline 202 or Equivalent

## Acute toxicity to algae/aquatic plants

ErC50, Pseudokirchneriella subcapitata (green algae), 72 Hour, 59.6 mg/l, OECD Test Guideline 201 or Equivalent

NOEC, Pseudokirchneriella subcapitata (green algae), 72 Hour, 4.37 mg/l, OECD Test Guideline 201 or Equivalent

#### Toxicity to bacteria

EC10, Pseudomonas putida, 72 Hour, 136 mg/l

# Chronic toxicity to aquatic invertebrates

NOEC, Daphnia magna (Water flea), 21 d, 0.125 mg/l

#### benzothiazole-2-thiol

## Acute toxicity to fish

Material is highly toxic to aquatic organisms on an acute basis (LC50/EC50 between 0.1 and 1 mg/L in the most sensitive species tested).

LC50, Lepomis macrochirus (Bluegill sunfish), static test, 96 Hour, 1.5 mg/l, Method Not Specified.

LC50, Oncorhynchus mykiss (rainbow trout), static test, 96 Hour, 0.75 mg/l, Method Not Specified.

#### Acute toxicity to aquatic invertebrates

EC50, Daphnia magna (Water flea), 48 Hour, 0.71 mg/l, OECD Test Guideline 202 or Equivalent

#### Acute toxicity to algae/aquatic plants

ErC50, Pseudokirchneriella subcapitata (algae), 72 Hour, Growth rate inhibition, 0.5 mg/l, OECD Test Guideline 201

NOEC, Pseudokirchneriella subcapitata (algae), 72 Hour, Growth rate inhibition, 0.066 mg/l, OECD Test Guideline 201

#### Toxicity to bacteria

EC50, Protozoa, 24 Hour, 10 mg/l

## Chronic toxicity to fish

NOEC, Oncorhynchus mykiss (rainbow trout), 89 d, 0.041 mg/l

MATC (Maximum Acceptable Toxicant Level), Oncorhynchus mykiss (rainbow trout), 89 d,

0.041 - 0.078 mg/l

LOEC, Oncorhynchus mykiss (rainbow trout), 89 d, 0.078 mg/l

## Chronic toxicity to aquatic invertebrates

NOEC, Daphnia magna (Water flea), 21 d, 0.08 mg/l

#### **Diallyl maleate**

#### Acute toxicity to fish

Material is harmful to aquatic organisms (LC50/EC50/IC50 between 10 and 100 mg/L in the most sensitive species).

LC50, 96 Hour, > 10 - 100 mg/l

## Acute toxicity to aquatic invertebrates

EC50, 48 Hour, > 10 - 100 mg/l

## Acute toxicity to algae/aquatic plants

EC50, 96 Hour, > 10 - 100 mg/l

#### Persistence and degradability

## 3-Trimethoxysilylpropyl methacrylate

Biodegradability: Material is readily biodegradable. Passes OECD test(s) for ready

biodegradability. 10-day Window: Pass **Biodegradation:** 69 % **Exposure time:** 28 d

Method: OECD Test Guideline 301F or Equivalent

#### Stability in Water (1/2-life)

Hydrolysis, DT50, 4.7 Hour, pH 7

## Isobutyl trimethoxysilane

**Biodegradability:** Based on stringent OECD test guidelines, this material cannot be considered as readily biodegradable; however, these results do not necessarily mean that the material is not biodegradable under environmental conditions.

10-day Window: Fail **Biodegradation:** 36 - 47 % **Exposure time:** 28 d

Method: OECD Test Guideline 301B

#### Stability in Water (1/2-life)

Hydrolysis, DT50, 4.6 Hour, pH 7

## Octamethyltrisiloxane

Product name: DOWSIL™ EA-7100 Adhesive

Biodegradability: Biodegradation under aerobic laboratory conditions is below detectable

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limits (BOD20 or BOD28/ThOD < 2.5%).

10-day Window: Not applicable

**Biodegradation:** 0 % **Exposure time:** 28 d

Method: OECD Test Guideline 310 or Equivalent

**Photodegradation** 

Atmospheric half-life: 8.94 d

Method: Estimated.

## Dibenzoyl peroxide

Biodegradability: Material has inherent, primary biodegradability according to OECD test (s)

guidelines (reaches > 20% biodegradation in OECD test(s).

10-day Window: Fail **Biodegradation:** 68 % **Exposure time:** 28 d

Method: OECD Test Guideline 301D or Equivalent

Theoretical Oxygen Demand: 1.44 mg/mg Calculated.

## **Magnesium Oxide**

**Biodegradability:** Biodegradability is not applicable to inorganic substances.

## Silane, trimethoxy[2-(7-oxabicyclo[4.1.0]hept-3-yl)ethyl]-

Biodegradability: 10-day Window: Fail

**Biodegradation:** 28 % **Exposure time:** 28 d

Method: OECD Test Guideline 301D

For similar material(s): Based on stringent OECD test guidelines, this material cannot be considered as readily biodegradable; however, these results do not necessarily mean that the

material is not biodegradable under environmental conditions.

#### Stability in Water (1/2-life)

Hydrolysis, DT50, 4.4 Hour, pH 7

#### **Allyl Methacrylate**

Biodegradability: Material is readily biodegradable. Passes OECD test(s) for ready

biodegradability.

10-day Window: Not applicable

Biodegradation: 62 % Exposure time: 14 d

Method: OECD Test Guideline 301C or Equivalent

## benzothiazole-2-thiol

Biodegradability: Material is expected to biodegrade very slowly (in the environment). Fails

to pass OECD/EEC tests for ready biodegradability.

10-day Window: Not applicable **Biodegradation:** 2.5 %

Exposure time: 14 d

Method: OECD Test Guideline 301C or Equivalent

# **Diallyl maleate**

**Biodegradability:** Material is expected to be readily biodegradable.

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For similar material(s): 10-day Window: Pass

Biodegradation: 96.7 % Exposure time: 28 d

Method: OECD Test Guideline 301B or Equivalent

## Bioaccumulative potential

#### 3-Trimethoxysilylpropyl methacrylate

**Bioaccumulation:** Bioconcentration potential is low (BCF < 100 or Log Pow < 3). **Partition coefficient:** n-octanol/water(log Pow): 2.1 OECD Test Guideline 107

## Isobutyl trimethoxysilane

**Bioaccumulation:** Bioconcentration potential is low (BCF < 100 or Log Pow < 3). **Partition coefficient:** n-octanol/water(log Pow): 2.1 Estimated.

## **Octamethyltrisiloxane**

**Bioaccumulation:** Bioconcentration potential is high (BCF > 3000 or Log Pow between 5 and 7).

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Partition coefficient: n-octanol/water(log Pow): 5.35 Estimated.

**Bioconcentration factor (BCF):** >= 500 Pimephales promelas (fathead minnow) OECD

Test Guideline 305

## **Dibenzoyl peroxide**

**Bioaccumulation:** Bioconcentration potential is low (BCF < 100 or Log Pow < 3). Potential for mobility in soil is high (Koc between 50 and 150). Bioconcentration potential is low (BCF < 100 or Log Pow < 3).

Partition coefficient: n-octanol/water(log Pow): 3.46 at 25 °C Measured

Bioconcentration factor (BCF): 89.11 Fish Estimated.

## **Magnesium Oxide**

Bioaccumulation: No relevant data found.

## Silane, trimethoxy[2-(7-oxabicyclo[4.1.0]hept-3-yl)ethyl]-

**Bioaccumulation:** Bioconcentration potential is low (BCF < 100 or Log Pow < 3).

Partition coefficient: n-octanol/water(log Pow): 2.5

#### **Allyl Methacrylate**

**Bioaccumulation:** Bioconcentration potential is low (BCF < 100 or Log Pow < 3).

Partition coefficient: n-octanol/water(log Pow): 1.48 Measured

## benzothiazole-2-thiol

**Bioaccumulation:** Bioconcentration potential is low (BCF < 100 or Log Pow < 3).

Partition coefficient: n-octanol/water(log Pow): 2.34 - 2.5 Measured

Bioconcentration factor (BCF): < 0.8 Cyprinus carpio (Carp) 42 d Measured

# **Diallyl maleate**

**Bioaccumulation:** Bioconcentration potential is moderate (BCF between 100 and 3000 or Log Pow between 3 and 5).

Partition coefficient: n-octanol/water(log Pow): 2.90 Estimated.

Bioconcentration factor (BCF): 38 Fish Estimated.

# Mobility in soil

## 3-Trimethoxysilylpropyl methacrylate

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No relevant data found.

# **Isobutyl trimethoxysilane**

No relevant data found.

#### Octamethyltrisiloxane

Potential for mobility in soil is slight (Koc between 2000 and 5000).

Partition coefficient (Koc): 3179 Estimated.

## **Dibenzoyl peroxide**

Potential for mobility in soil is high (Koc between 50 and 150).

Partition coefficient (Koc): 91.77 Estimated.

#### **Magnesium Oxide**

No relevant data found.

# Silane, trimethoxy[2-(7-oxabicyclo[4.1.0]hept-3-yl)ethyl]-

Potential for mobility in soil is very high (Koc between 0 and 50).

Partition coefficient (Koc): 5.1

#### **Allyl Methacrylate**

No relevant data found.

#### benzothiazole-2-thiol

No relevant data found.

#### **Diallyl maleate**

Potential for mobility in soil is very high (Koc between 0 and 50).

Partition coefficient (Koc): 31 Estimated.

# 13. DISPOSAL CONSIDERATIONS

Disposal methods: DO NOT DUMP INTO ANY SEWERS, ON THE GROUND, OR INTO ANY BODY OF WATER. All disposal practices must be in compliance with all Federal, State/Provincial and local laws and regulations. Regulations may vary in different locations. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator. AS YOUR SUPPLIER, WE HAVE NO CONTROL OVER THE MANAGEMENT PRACTICES OR MANUFACTURING PROCESSES OF PARTIES HANDLING OR USING THIS MATERIAL. THE INFORMATION PRESENTED HERE PERTAINS ONLY TO THE PRODUCT AS SHIPPED IN ITS INTENDED CONDITION AS DESCRIBED IN MSDS SECTION: Composition Information. FOR UNUSED & UNCONTAMINATED PRODUCT, the preferred options include sending to a licensed, permitted: Incinerator or other thermal destruction device. For additional information, refer to: Handling & Storage Information, MSDS Section 7 Stability & Reactivity Information, MSDS Section 10 Regulatory Information, MSDS Section 15

**Treatment and disposal methods of used packaging:** Empty containers should be recycled or otherwise disposed of by an approved waste management facility. Waste characterizations and compliance with applicable laws are the responsibility solely of the waste generator. Do not re-use containers for any purpose.

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## 14. TRANSPORT INFORMATION

DOT

Not regulated for transport

Classification for SEA transport (IMO-IMDG):

Proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID,

N.O.S.(Dibenzoyl peroxide)

UN number UN 3077 Class 9 Packing group III

Marine pollutant Dibenzoyl peroxide

Transport in bulk Consult IMO regulations before transporting ocean bulk

according to Annex I or II of MARPOL 73/78 and the

**IBC or IGC Code** 

Classification for AIR transport (IATA/ICAO):

**Proper shipping name** Environmentally hazardous substance, solid, n.o.s.(Dibenzoyl

peroxide)

**UN number** UN 3077

Class 9
Packing group III

#### Further information:

VENTED PACKAGES ARE FORBIDDEN FOR AIR TRANSPORT.

This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. Transportation classifications may vary by container volume and may be influenced by regional or country variations in regulations. Additional transportation system information can be obtained through an authorized sales or customer service representative. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the material.

#### 15. REGULATORY INFORMATION

Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Sections 311 and 312

Respiratory or skin sensitisation

Carcinogenicity

Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Section 313

The following components are subject to reporting levels established by SARA Title III, Section 313:

ComponentsCASRNDibenzoyl peroxide94-36-0

# Pennsylvania Right To Know

The following chemicals are listed because of the additional requirements of Pennsylvania law:

Components	CASRN
Crosslinked Organo Siloxane	Trade secret
Hexamethyldisilazane reaction with Silica	68909-20-6
DiMe Siloxane,methoxy-terminated	Not available
Modified silica	Trade secret
Dimethyl siloxane, trimethoxysilyl-terminated	Not available
3-Trimethoxysilylpropyl methacrylate	2530-85-0
Isobutyl trimethoxysilane	18395-30-7
Octamethyltrisiloxane	107-51-7
Dibenzoyl peroxide	94-36-0
Magnesium Oxide	1309-48-4

#### California Prop. 65

This product contains a chemical that is at or below California Propositions 65's "safe harbor level" as determined via a risk assessment. Therefore, the chemical is not required to be listed as a Prop 65 chemical on the SDS or label.

## **United States TSCA Inventory (TSCA)**

All components of this product are in compliance with the inventory listing requirements of the U.S. Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

## 16. OTHER INFORMATION

# **Hazard Rating System**

#### **NFPA**

	Health	Flammability	Instability
	2	1	0
H	MIS		
	Health	Flammability	Physical Hazard

1

## Revision

Identification Number: 4114677 / A713 / Issue Date: 07/23/2020 / Version: 11.0

Most recent revision(s) are noted by the bold, double bars in left-hand margin throughout this

document.

Legend

_090	
ACGIH	USA. ACGIH Threshold Limit Values (TLV)
ACGIH BEI	ACGIH - Biological Exposure Indices (BEI)
CAL PEL	California permissible exposure limits for chemical contaminants (Title 8, Article 107)
CEIL	Acceptable ceiling concentration
Dow IHG	Dow Industrial Hygiene Guideline

<sup>\* =</sup> Chronic Effects (See Hazards Identification)

OSHA CARC	OSHA Specifically Regulated Chemicals/Carcinogens	
OSHA P0	USA. OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000	
OSHA Z-1	USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air	
	Contaminants	
OSHA Z-2	USA. Occupational Exposure Limits (OSHA) - Table Z-2	
Peak	Acceptable maximum peak above the acceptable ceiling concentration for an 8-hr	
	shift	
PEL	Permissible exposure limit (PEL)	
STEL	Short term exposure limit	
TWA	8-hour time weighted average	
US WEEL	USA. Workplace Environmental Exposure Levels (WEEL)	

#### Full text of other abbreviations

AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration: ICAO - International Civil Aviation Organization: IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO -International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO -International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 -Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention: PBT - Persistent, Bioaccumulative and Toxic substance: PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA -Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA -Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

#### **Information Source and References**

This SDS is prepared by Product Regulatory Services and Hazard Communications Groups from information supplied by internal references within our company.

DOW SILICONES CORPORATION urges each customer or recipient of this (M)SDS to study it carefully and consult appropriate expertise, as necessary or appropriate, to become aware of and understand the data contained in this (M)SDS and any hazards associated with the product. The information herein is provided in good faith and believed to be accurate as of the effective date shown

above. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ between various locations. It is the buyer's/user's responsibility to ensure that his activities comply with all federal, state, provincial or local laws. The information presented here pertains only to the product as shipped. Since conditions for use of the product are not under the control of the manufacturer, it is the buyer's/user's duty to determine the conditions necessary for the safe use of this product. Due to the proliferation of sources for information such as manufacturer-specific (M)SDSs, we are not and cannot be responsible for (M)SDSs obtained from any source other than ourselves. If you have obtained an (M)SDS from another source or if you are not sure that the (M)SDS you have is current, please contact us for the most current version.