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#### **SECTION 1. IDENTIFICATION**

Product name : Sikagard® Duroplast®-100 Part A

Other means of identification : No data available

Company name : www.sika.ca

Canada

Pointe-Claire, QC H9R 4A9

601, avenue Delmar Sika Canada Inc.

Telephone : (514) 697-2610 / 1 (800) 933-7452

Telefax : (514) 694-2792

E-mail address : ehs@ca.sika.com

Emergency telephone : CANUTEC (collect) (613) 996-6666 (24 hours)

Recommended use of the chemical and restrictions on

use

For further information, refer to product data sheet.

### **SECTION 2. HAZARDS IDENTIFICATION**

GHS classification in accordance with the Hazardous Products Regulations

Flammable liquids : Category 3

Skin irritation : Category 2

Eye irritation : Category 2A

Skin sensitization : Sub-category 1A

Carcinogenicity (Inhalation) : Category 1A

Specific target organ toxicity

- single exposure

Category 3 (Respiratory system)

Specific target organ toxicity

- repeated exposure

Category 1 (Lungs)

**GHS** label elements

Hazard pictograms :







Signal Word : Danger



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Hazard Statements : H226 Flammable liquid and vapor.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction. H319 Causes serious eye irritation. H335 May cause respiratory irritation. H350 May cause cancer by inhalation.

H372 Causes damage to organs (Lungs) through prolonged or

repeated exposure.

# Precautionary Statements

#### Prevention:

P201 Obtain special instructions before use.

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

P210 Keep away from heat, hot surfaces, sparks, open flames

and other ignition sources. No smoking. P233 Keep container tightly closed.

P240 Ground and bond container and receiving equipment. P241 Use explosion-proof electrical/ ventilating/ lighting/ equip-

ment.

P242 Use non-sparking tools.

P243 Take action to prevent static discharges.

P260 Do not breathe mist or vapors.

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 should not be allowed out of

the workplace.

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

#### Response:

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

P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell.

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.

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

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

P362 + P364 Take off contaminated clothing and wash it before

P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

#### Storage:

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



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P403 + P235 Store in a well-ventilated place. Keep cool.

P405 Store locked up.

### Disposal:

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

posal plant.

### **Additional Labeling**

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

#### Other hazards

None known.

### **SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS**

Substance / Mixture : Mixture

# Components

Chemical name	CAS-No.	Classification	Concentra- tion (% w/w)
Quartz (SiO2)	14808-60-7	Carc. 1A; H350i STOT RE 1; H372	>= 30 - < 60
		STOT SE 3; H335	
bisphenol-A-(epichlorhydrin) epoxy	25068-38-6	Skin Irrit. 2; H315	>= 30 - < 60
resin		Eye Irrit. 2A; H319	
oxirane, mono[(C12-14-	68609-97-2	Skin Sens. 1; H317 Skin Irrit. 2; H315	>= 1 - < 5
alkyloxy)methyl]derivatives	00000 07 2	Skin Sens. 1; H317	/- / (0
Isopropanol	67-63-0	Flam. Liq. 2; H225	>= 1 - < 5
		Eye Irrit. 2A; H319	
2-octyl-2H-isothiazole-3-one (OIT)	26530-20-1	STOT SE 3; H336 Acute Tox. 3; H301	>= 0.1 - < 1
	20000 20 .	Acute Tox. 2; H330	
		Acute Tox. 3; H311	
		Skin Corr. 1; H314	
		Eye Dam. 1; H318	
		Skin Sens. 1A; H317	

Actual concentration or concentration range is withheld as a trade secret

#### **SECTION 4. FIRST AID MEASURES**

General advice : Move out of dangerous area.

Consult a physician.

Show this material safety data sheet to the doctor in attend-

ance.

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.



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

Remove contact lenses.

Keep eye wide open while rinsing.

If eye irritation persists, consult a specialist.

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

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

Cough

Respiratory disorder Allergic reactions Excessive lachrymation

Erythema **Dermatitis** 

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.

Notes to physician Treat symptomatically.

### **SECTION 5. FIRE-FIGHTING MEASURES**

Suitable extinguishing media Alcohol-resistant foam

Carbon dioxide (CO2)

Dry chemical

Unsuitable extinguishing

media

Water

Further information Use water spray to cool unopened containers.

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.

for fire-fighters

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

### **SECTION 6. ACCIDENTAL RELEASE MEASURES**

Personal precautions, protec- : tive equipment and emer-

Use personal protective equipment. Remove all sources of ignition.



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gency procedures Deny access to unprotected persons.

Beware of vapors accumulating to form explosive concentra-

tions. Vapors can accumulate in low areas.

Environmental precautions : Prevent product from entering drains.

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

Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local

/ national regulations (see section 13).

#### **SECTION 7. HANDLING AND STORAGE**

Advice on protection against

fire and explosion

Use explosion-proof equipment.

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

smoking.

Take precautionary measures against electrostatic discharg-

es.

Advice on safe handling : Do not breathe vapors or spray mist.

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 ap-

plication area.

Take precautionary measures against static discharge.

Open drum carefully as content may be under pressure.

Take necessary action to avoid static electricity discharge

(which might cause ignition of organic vapors).

Follow standard hygiene measures when handling chemical

products.

Conditions for safe storage : Store in original container.

Keep in a well-ventilated place.

Containers which are opened must be carefully resealed and

kept upright to prevent leakage. Observe label precautions.

Store in accordance with local regulations.

Materials to avoid : Explosives

Oxidizing agents Poisonous gases Poisonous liquids



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# **SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

# Ingredients with workplace control parameters

Components	CAS-No.	Value type	Control parame-	Basis
•		(Form of	ters / Permissible	
		exposure)	concentration	
Quartz (SiO2)	14808-60-7	TWA (Res-	0.025 mg/m3	CA AB OEL
		pirable par-		
		ticulates)		
		TWA (Res-	0.1 mg/m3	CA ON OEL
		pirable frac-		
		tion)		
		TWAEV	0.1 mg/m3	CA QC OEL
		(respirable		
		dust)		
		TWA (Res-	0.025 mg/m3	CA BC OEL
		pirable)	(Silica)	
		TWA (Res- pirable)	0.025 mg/m3	CA BC OEL
		TWA (Respirable)	0.025 mg/m3 (Silica)	CA BC OEL
		TWA (Res-	0.025 mg/m3	ACGIH
		pirable par-		
		ticulate mat-		
		ter)		
		TWA (Res-	0.025 mg/m3	ACGIH
		pirable par-	(Silica)	
		ticulate mat-	,	
		ter)		
		TWA (Res-	0.025 mg/m3	ACGIH
		pirable par-		
		ticulate mat-		
		ter)		
		TWA (Res-	0.025 mg/m3	ACGIH
		pirable par-	(Silica)	
		ticulate mat-		
		ter)		
barium sulfate	7727-43-7	TWA	10 mg/m3	CA AB OEL
		TWA (Inhal- able)	5 mg/m3	CA BC OEL
		TWAEV (in-	5 mg/m3	CA QC OEL
		halable dust)		
		TWA (Inhal-	5 mg/m3	ACGIH
		able particu-		
		late matter)		
Isopropanol	67-63-0	TWA	200 ppm 492 mg/m3	CA AB OEL
		STEL	400 ppm 984 mg/m3	CA AB OEL
		TWA	200 ppm	CA BC OEL
		STEL	400 ppm	CA BC OEL
		TWAEV	400 ppm	CA QC OEL



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	983 mg/m3	
STEV	500 ppm	CA QC OEL
	1,230 mg/m3	

**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.

The engineering controls also need to keep gas, vapor or dust concentrations below any lower explosive 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 as-

sessment indicates this is necessary.

The filter class for the respirator must be suitable for the max-

imum 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 : 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 nec-

essary.

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 concen-

tration and amount of dangerous substances, and to the spe-

cific work-place.

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

Wash hands before breaks and immediately after handling

the product.

Remove respiratory and skin/eye protection only after vapors

have been cleared from the area.

Remove contaminated clothing and protective equipment

before entering eating areas. Wash thoroughly after handling.

### **SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

Appearance : liquid

Color : various



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Odor : aromatic, epoxy-like

Odor Threshold : No data available

pH : not determined

Melting point/range / Freezing :

point

No data available

Boiling point/boiling range : No data available

Flash point : ca. 30 °C (86 °F)

(Method: closed cup)

Evaporation rate : No data available

Flammability (solid, gas) : No data available

Upper explosion limit / Upper

flammability limit

No data available

Lower explosion limit / Lower :

flammability limit

No data available

Vapor pressure : 0.01 hpa

Relative vapor density : No data available

Density : 1.607 g/ml (23 °C (73 °F))

Solubility(ies)

Water solubility : not determined

Solubility in other solvents : No data available

Partition coefficient: n-

octanol/water

No data available

Autoignition temperature : 425 °C

Decomposition temperature : No data available

Viscosity

Viscosity, dynamic : No data available

Viscosity, kinematic : not determined

Explosive properties : No data available

Oxidizing properties : No data available



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### **SECTION 10. STABILITY AND REACTIVITY**

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

Chemical stability : The product is chemically stable.

Possibility of hazardous reac- :

tions

Stable under recommended storage conditions. Vapors may form explosive mixture with air.

Conditions to avoid : Heat, flames and sparks.

Incompatible materials : No data available

Hazardous decomposition

products

No decomposition if stored and applied as directed.

#### **SECTION 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

**Isopropanol:** 

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

Acute inhalation toxicity : LC50 (Rat): > 20 mg/l

Exposure time: 4 h
Test atmosphere: vapor

Acute dermal toxicity : LD50 Dermal (Rabbit): > 5,000 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.

### Carcinogenicity

May cause cancer by inhalation.

Group 1: Carcinogenic to humans **IARC** 

> Quartz (SiO2) 14808-60-7

(Silica dust, crystalline)

**OSHA** OSHA specifically regulated carcinogen

> Quartz (SiO2) 14808-60-7

(crystalline silica)

**NTP** Known to be human carcinogen

> Quartz (SiO2) 14808-60-7

(Silica, Crystalline (Respirable Size))

#### 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.

#### **Further information**

#### **Product:**

Quartz (14808-60-7): This classification is relevant when exposed to Quartz (silicon dioxide) in dust or powder form only, including cured product that is subject to sanding, grinding,

cutting, or other surface preparation activities.

#### **SECTION 12. ECOLOGICAL INFORMATION**

### **Ecotoxicity**

# **Components:**

#### bisphenol-A-(epichlorhydrin) epoxy resin:

Toxicity to fish : LC50 (Oncorhynchus mykiss (rainbow trout)): 2 mg/l

Exposure time: 96 h

Toxicity to daphnia and other : EC50 (Daphnia magna (Water flea)): 1.8 mg/l

aquatic invertebrates Exposure time: 48 h

#### Isopropanol:



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Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): 9,640 mg/l

Exposure time: 96 h

Method: OECD Test Guideline 203

Toxicity to daphnia and other :

aquatic invertebrates

LC50 (Daphnia magna (Water flea)): 9,714 mg/l

Exposure time: 24 h

Method: OECD Test Guideline 202

Toxicity to algae/aquatic

plants

EC50 (Scenedesmus capricornutum (fresh water algae)): >

100 mg/l

Exposure time: 72 h

# 2-octyl-2H-isothiazole-3-one (OIT):

# Persistence and degradability

No data available

# **Bioaccumulative potential**

No data available

# Mobility in soil

No data available

#### Other adverse effects

#### **Product:**

Additional ecological infor-

mation

Do not empty into drains; dispose of this material and its con-

tainer in a safe way.

Avoid dispersal of spilled material and runoff and contact with

soil, waterways, drains and sewers.

Toxic to aquatic organisms, may cause long-term adverse

effects in the aquatic environment.

May be harmful to the environment if released in large quanti-

ties.

Water polluting material.

### **SECTION 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 han-

dling site for recycling or disposal.

# **SECTION 14. TRANSPORT INFORMATION**

#### International Regulations

#### IATA-DGR



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UN/ID No. : UN 1139

Proper shipping name : Coating solution

Class : 3 Packing group : III

Labels : Flammable Liquids

Packing instruction (cargo : 366

aircraft)

Packing instruction (passen: 355

ger aircraft)

IMDG-Code

UN number : UN 1139

Proper shipping name : COATING SOLUTION

Class : 3
Packing group : III
Labels : 3
EmS Code : F-E, S-E
Marine pollutant : yes

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

Not applicable for product as supplied.

# **Domestic regulation**

**TDG** 

UN number : UN 1139

Proper shipping name : COATING SOLUTION

Class : 3
Packing group : III
Labels : 3
ERG Code : 127
Marine pollutant : no

#### Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

#### **SECTION 15. REGULATORY INFORMATION**

#### **Canadian lists**

No substances are subject to a Significant New Activity Notification.

#### **SECTION 16. OTHER INFORMATION**

### Full text of other abbreviations

ACGIH : USA. ACGIH Threshold Limit Values (TLV)

CA AB OEL : Canada. Alberta, Occupational Health and Safety Code (table

2: OEL)



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CA BC OEL : Canada. British Columbia OEL

CA ON OEL : Ontario Table of Occupational Exposure Limits made under

the Occupational Health and Safety Act.

CA QC OEL : Québec. Regulation respecting occupational health and safe-

ty, Schedule 1, Part 1: Permissible exposure values for air-

borne contaminants

ACGIH / TWA : 8-hour, time-weighted average CA AB OEL / TWA : 8-hour Occupational exposure limit : 15-minute occupational exposure limit

CA BC OEL / TWA : 8-hour time weighted average CA BC OEL / STEL : short-term exposure limit

CA ON OEL / TWA : Time-Weighted Average Limit (TWA)
CA QC OEL / TWAEV : Time-weighted average exposure value

CA QC OEL / STEV : Short-term exposure value

ADR : Accord européen relatif au transport international des

marchandises Dangereuses par Route

CAS : Chemical Abstracts Service
DNEL : Derived no-effect level

EC50 : Half maximal effective concentration

GHS : Globally Harmonized System

IATA : International Air Transport Association
IMDG : International Maritime Code for Dangerous Goods

international Maritime Code for Dangerous Goods

LD50 : Median lethal dosis (the amount of a material, given all at

once, which causes the death of 50% (one half) of a group of

test animals)

LC50 : Median lethal concentration (concentrations of the chemical in

air that kills 50% of the test animals during the observation

period)

MARPOL : International Convention for the Prevention of Pollution from

Ships, 1973 as modified by the Protocol of 1978

OEL : Occupational Exposure Limit

PBT : Persistent, bioaccumulative and toxic PNEC : Predicted no effect concentration

REACH : Regulation (EC) No 1907/2006 of the European Parliament

and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency

SVHC : Substances of Very High Concern

vPvB : Very persistent and very bioaccumulative

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Revision Date : 09/08/2021 Date format : mm/dd/yyyy

Prepared by : R & D of Sika Canada Inc.

Material number : 473,711

CA / Z8