## Sikaflex®-291 LOT



Version Revision Date: SDS Number: 1.0 02/27/2018 000000608991

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

Product name Sikaflex®-291 LOT

Manufacturer or supplier's details

Company name 601, avenue Delmar

Canada

Pointe-Claire, QC H9R 4A9

Sika Canada Inc. www.sika.ca

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

Telefax (514) 694-2792

Health and Safety Services's : ehs@ca.sika.com

e-mail address

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** 

Respiratory sensitization : Category 1

Skin sensitization : Category 1

Carcinogenicity (Inhalation) : Category 1A

**GHS** label elements

Hazard pictograms



Signal Word : Danger

Hazard Statements H317 May cause an allergic skin reaction.

H334 May cause allergy or asthma symptoms or breathing diffi-

culties if inhaled.

H350i May cause cancer by inhalation.

Prevention: **Precautionary Statements** 

P201 Obtain special instructions before use.

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

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/ protective clothing/ eye protection/ face protection.

P284 In case of inadequate ventilation wear respiratory protection.

## Response:

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

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

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

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

attention.

P362 + P364 Take off contaminated clothing and wash it before reuse.

## Storage:

P405 Store locked up.

#### Disposal:

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

#### Other hazards

None known.

### **Supplemental information**

If product is in liquid or paste form, physical or health hazards listed related to dust are not considered significant. However, product may contain substances that could be potential hazards if caused to become airborne due to grinding, sanding or other abrasive processes.

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

### **Hazardous ingredients**

Chemical name	CAS-No.	Concentration (% w/w)
Quartz (SiO2) <5µm	14808-60-7	>= 0.1 - < 1
Toluene diisocyanate, oligomeric reaction products with 2,2'-oxydiethanol and propylidenetrimethanol	53317-61-6	>= 0.1 - < 1
4,4'-methylenediphenyl diisocyanate	101-68-8	>= 0.1 -<1

#### **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.

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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.

: Remove contact lenses. In case of eye contact

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

: sensitizing effects carcinogenic effects Asthmatic appearance

Allergic reactions

See Section 11 for more detailed information on health effects

and symptoms.

May cause an allergic skin reaction.

May cause allergy or asthma symptoms or breathing difficul-

ties if inhaled.

May cause cancer by inhalation.

Notes to physician : Treat symptomatically.

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

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

cumstances and the surrounding environment.

Further information : 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.

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

tive equipment and emer-

gency procedures

Personal precautions, protec- : Use personal protective equipment. Deny access to unprotected persons.

**Environmental precautions** : 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

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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.

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

Advice on protection against

fire and explosion

: Normal measures for preventive fire protection.

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.

Follow standard hygiene measures when handling chemical

products.

Conditions for safe storage

: Prevent unauthorized access.

Store in original container.

Keep container tightly closed in a dry and well-ventilated

place.

Observe label precautions.

Store in accordance with local regulations.

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

## Ingredients with workplace control parameters

Ingredients	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Quartz (SiO2) <5µm	14808-60-7	TWA (Respirable fraction)	0.1 mg/m3	CA ON OEL
		TWA (Res- pirable par- ticulates)	0.025 mg/m3	CA AB OEL
		TWAEV (respirable dust)	0.1 mg/m3	CA QC OEL
		TWA (Respirable)	0.025 mg/m3 (Silica)	CA BC OEL
		TWA (Res- pirable frac-	0.025 mg/m3 (Silica)	ACGIH

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		tion)		
4,4'-methylenediphenyl diisocyanate	101-68-8	TWA	0.005 ppm	CA BC OEL
		С	0.01 ppm	CA BC OEL
		TWA	0.005 ppm	CA ON OEL
		С	0.02 ppm	CA ON OEL
		TWA	0.005 ppm 0.05 mg/m3	CA AB OEL
		TWAEV	0.005 ppm 0.051 mg/m3	CA QC OEL
		TWA	0.005 ppm	ACGIH

**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 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 contaminated clothing and protective equipment

before entering eating areas. Wash thoroughly after handling.

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

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Appearance : paste

Color : various

Odor : characteristic

Odor Threshold : No data available

pH : Not applicable

Melting point/range / Freezing

point

: No data available

Boiling point/boiling range : No data available

Flash point : Not applicable

Evaporation rate : No data available

Flammability (solid, gas) : No data available

Upper explosion limit : No data available

Lower explosion limit : No data available

Vapor pressure : 0.01 hpa (0.01 mmHg)

Relative vapor density : No data available

Density : ca. 1.48 g/cm3 (23 °C (73 °F) ())

Solubility(ies)

Water solubility : insoluble

Partition coefficient: n-

octanol/water

: No data available

Autoignition temperature : No data available

Decomposition temperature : No data available

Viscosity

Viscosity, dynamic : No data available

Viscosity, kinematic : > 20.5 mm2/s

Explosive properties : No data available

Molecular weight : No data available

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

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

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Chemical stability : The product is chemically stable.

Possibility of hazardous reac-

tions

: Stable under recommended storage conditions.

Conditions to avoid : No data available

Incompatible materials : No data available

No decomposition if stored and applied as directed.

#### **SECTION 11. TOXICOLOGICAL INFORMATION**

### **Acute toxicity**

Not classified based on available information.

#### Ingredients:

Toluene diisocyanate, oligomeric reaction products with 2,2'-oxydiethanol and propylidenetrimethanol:

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

#### 4,4'-methylenediphenyl diisocyanate:

Acute inhalation toxicity : Acute toxicity estimate: 1.5 mg/l

Test atmosphere: dust/mist Method: Expert judgment

#### Skin corrosion/irritation

Not classified based on available information.

#### Serious eye damage/eye irritation

Not classified based on available information.

## Respiratory or skin sensitization

Skin sensitization: May cause an allergic skin reaction.

Respiratory sensitization: May cause allergy or asthma symptoms or breathing difficulties if inhaled.

## Germ cell mutagenicity

Not classified based on available information.

## Carcinogenicity

May cause cancer by inhalation.

IARC Group 1: Carcinogenic to humans

Quartz (SiO2) <5µm 14808-60-7

Group 2B: Possibly carcinogenic to humans

titanium dioxide 13463-67-7

Carbon black 1333-86-4

NTP Known to be human carcinogen

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Quartz (SiO2) <5µm 14808-60-7

## Reproductive toxicity

Not classified based on available information.

#### STOT-single exposure

Not classified based on available information.

#### STOT-repeated exposure

Not classified based on available information.

#### **Aspiration toxicity**

Not classified based on available information.

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

### **Ecotoxicity**

No data available

#### 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 container in a safe way.

Avoid dispersal of spilled material and runoff and contact with

soil, waterways, drains and sewers.

#### **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**

### **Domestic regulation**

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TDG (road/train)

Not dangerous goods

International Regulations

**IATA-DGR** 

Not dangerous goods

**IMDG-Code** 

Not dangerous goods

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

Not applicable for product as supplied.

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

#### **Canadian lists**

No substances are subject to a Significant New Activity Notification.

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

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Prepared by : R & D of Sika Canada Inc.

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#### Full text of other abbreviations

CAS

ADR Accord européen relatif au transport international des marchandises

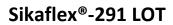
Dangereuses par Route Chemical Abstracts Service

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

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





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	causes the death of 50% (one h	nalf) 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		