Sikaflex®-291 LOT



Version Revision Date: SDS Number: 1.5 12/21/2016 000000604224

SECTION 1. IDENTIFICATION

Product name : Sikaflex®-291 LOT

Manufacturer or supplier's details

Sika Canada Inc. Company name

601, avenue Delmar

Pointe-Claire, QC H9R 4A9

Canada 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

Skin sensitization : Category 1

Carcinogenicity (Inhalation) : Category 1A

Specific target organ system-

ic toxicity - repeated expo-

sure (Inhalation)

: Category 2 (hearing organs)

GHS label elements

Hazard pictograms





Signal Word : Danger

Hazard Statements : H317 May cause an allergic skin reaction.

H350i May cause cancer by inhalation.

H373 May cause damage to organs (hearing organs) through

prolonged or repeated exposure if inhaled.

Sikaflex®-291 LOT



Version **Revision Date:** SDS Number: 1.5 12/21/2016 000000604224

Precautionary Statements : Prevention:

P201 Obtain special instructions before use.

P202 Do not handle until all safety precautions have been read

and understood.

P260 Do not breathe dust/ fume/ gas/ mist/ vapors/ spray. P272 Contaminated work clothing must not be allowed out of

the workplace.

P280 Wear protective gloves/ protective clothing/ eye protection/

face protection.

Response:

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

posal plant.

Warning : Reports have associated repeated and prolonged exposure to

> some of the chemicals in this product with permanent brain, liver, kidney and nervous system damage. Intentional misuse by deliberate concentration and inhalation of vapors may be harmful

or fatal.

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)
xylene	1330-20-7	>= 2 - < 5
ethylbenzene	100-41-4	>= 0 - < 1
Quartz (SiO2) <5µm	14808-60-7	>= 0 -< 1
aromatic polyisocyanate	53317-61-6	>= 0 -< 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-

Sikaflex®-291 LOT



Version Revision Date: SDS Number: 1.5 12/21/2016 000000604224

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.

In case of eye contact : Remove contact lenses.

Keep eye wide open while rinsing.

If eye irritation persists, consult a specialist.

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

Do not induce vomiting without medical advice.

Do not give milk or alcoholic beverages.

Never give anything by mouth to an unconscious person.

Obtain medical attention.

Most important symptoms and effects, both acute and

delayed

: sensitizing effects carcinogenic effects

Allergic reactions

See Section 11 for more detailed information on health effects

and symptoms.

May cause an allergic skin reaction. May cause cancer by inhalation.

May cause damage to organs through prolonged or repeated

exposure if inhaled.

: Treat symptomatically. Notes to physician

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 emergency procedures

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

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

If the product contaminates rivers and lakes or drains inform

Sikaflex®-291 LOT



 Version
 Revision Date:
 SDS Number:

 1.5
 12/21/2016
 000000604224

respective authorities.

Local authorities should be advised if significant spillages

cannot be contained.

Methods and materials for containment and cleaning up

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

acid binder, universal binder, sawdust).

Keep in suitable, closed containers for disposal.

SECTION 7. HANDLING AND STORAGE

Advice on protection against

fire and explosion

: Normal measures for preventive fire protection.

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

section 8).

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

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

used.

Smoking, eating and drinking should be prohibited in the 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
xylene	1330-20-7	TWA	100 ppm 434 mg/m3	CA AB OEL
		STEL	150 ppm 651 mg/m3	CA AB OEL
		TWAEV	100 ppm 434 mg/m3	CA QC OEL
		STEV	150 ppm 651 mg/m3	CA QC OEL
		TWA	100 ppm	CA BC OEL
		STEL	150 ppm	CA BC OEL
		TWA	100 ppm	ACGIH
		STEL	150 ppm	ACGIH

Sikaflex®-291 LOT



 Version
 Revision Date:
 SDS Number:

 1.5
 12/21/2016
 000000604224

ethylbenzene	100-41-4	TWA	100 ppm 434 mg/m3	CA AB OEL
		STEL	125 ppm 543 mg/m3	CA AB OEL
		TWA	20 ppm	CA BC OEL
		TWAEV	100 ppm 434 mg/m3	CA QC OEL
		STEV	125 ppm 543 mg/m3	CA QC OEL
		TWA	20 ppm	ACGIH
		STEL	125 ppm	ACGIH
Quartz (SiO2) <5μm	14808-60-7	TWA (Respirable fraction)	0.1 mg/m3	CA ON OEL
		TWA (Respirable particulates)	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 (Respirable fraction)	0.025 mg/m3 (Silica)	ACGIH

Biological occupational exposure limits

Ingredients	CAS-No.	Control parameters	Biological specimen	Sam- pling time	Permissible concentration	Basis
xylene	1330-20-7	Methylhip- puric acids	Urine	End of shift (As soon as possible after exposure ceases)	1.5 g/g creatinine	ACGIH BEI
ethylbenzene	100-41-4	Sum of mandelic acid and phenyl gly- oxylic acid	Urine	End of shift (As soon as possible after exposure ceases)	0.15 g/g creatinine	ACGIH BEI

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

Sikaflex®-291 LOT



 Version
 Revision Date:
 SDS Number:

 1.5
 12/21/2016
 000000604224

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

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

Appearance : paste

Color : various

Odor : aromatic

Odor Threshold : No data available

pH : No data available

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

Sikaflex®-291 LOT



 Version
 Revision Date:
 SDS Number:

 1.5
 12/21/2016
 000000604224

Lower explosion limit : No data available

Vapor pressure : ()

0.01 hpa (0.01 mmHg)

Relative vapor density : No data available

Density : ca. 1.4 g/cm3 (20 °C (68 °F) ())

Solubility(ies)

Water solubility : No data available

Solubility in other solvents : No data available

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 : ca. > 20.5 mm2/s (40 $^{\circ}$ C)

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.

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.

Sikaflex®-291 LOT



 Version
 Revision Date:
 SDS Number:

 1.5
 12/21/2016
 000000604224

Product:

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

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

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

Method: Calculation method

Ingredients:

aromatic polyisocyanate:

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

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: Not classified based on available information.

Germ cell mutagenicity

Not classified based on available information.

Carcinogenicity

May cause cancer by inhalation.

IARC Group 2B: Possibly carcinogenic to humans

titanium dioxide 13463-67-7

ethylbenzene 100-41-4

Carbon black 1333-86-4

Group 1: Carcinogenic to humans

Quartz (SiO2) <5μm 14808-60-7

NTP Known to be human carcinogen

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

May cause damage to organs (hearing organs) through prolonged or repeated exposure if inhaled.

Sikaflex®-291 LOT



 Version
 Revision Date:
 SDS Number:

 1.5
 12/21/2016
 000000604224

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 con-

tainer 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

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.

Sikaflex®-291 LOT



 Version
 Revision Date:
 SDS Number:

 1.5
 12/21/2016
 000000604224

SECTION 15. REGULATORY INFORMATION

Canadian lists

No substances are subject to a Significant New Activity Notification.

SECTION 16. OTHER INFORMATION

Revision Date : 12/21/2016

Prepared by : R & D of Sika Canada Inc.

Notice to Reader:

The information contained in this Material Safety Data Sheet applies only to the actual Sika Canada product identified and described herein. This information is not intended to address, nor does it address the use or application of the identified Sika product in combination with any other material, product or process. All of the information set forth herein is based on technical data regarding the identified product that Sika believes to be reliable as of the date hereof. Prior to each use of any Sika product, the user must always read and follow the warnings and instructions on the product's current Product Data Sheet, product label and Material Safety Data Sheet for each Sika product, which are available at web site and/or telephone number listed.

SIKA MAKES NO WARRANTIES EXPRESS OR IMPLIED AND ASSUMES NO LIABILITY ARISING FROM THIS INFORMATION OR ITS USE. SIKA SHALL NOT BE LIABLE UNDER ANY LEGAL THEORY FOR SPECIAL OR CONSEQUENTIAL DAMAGES AND SHALL NOT BE RESPONSIBLE FOR THE USE OF THIS PRODUCT IN A MANNER TO INFRINGE ON ANY PATENT OR ANY OTHER INTELLECTUAL PROPERTY RIGHTS HELD BY OTHERS.

All sales of Sika products are subject to its current terms and conditions of sale available at www.sika.ca or 514-697-2610.

Full text of other abbreviations

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

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





Version 1.5	Revision Date: 12/21/2016	SDS Number: 000000604224	
SVHC vPvB	European Chemicals Agency Substances of Very High Concern Very persistent and very bioaccumulative		
CA / Z8			