according to the Hazardous Products Regulations



# Sikaflex®-220+

Revision Date 10/24/2023 Print Date 10/24/2023

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

Product name : Sikaflex®-220+

Other means of identification : No data available

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

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

Respiratory sensitization : Category 1

Skin sensitization : Category 1

Specific target organ toxicity

- repeated exposure (Inhala-

tion)

Category 1 (Central nervous system)

#### **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.

H372 Causes damage to organs (Central nervous system)

through prolonged or repeated exposure if inhaled.



# Sikaflex®-220+

Revision Date 10/24/2023 Print Date 10/24/2023

**Precautionary Statements** 

Prevention:

P260 Do not breathe mist or vapors.

P264 Wash skin thoroughly after handling.

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

P272 Contaminated work clothing should not be allowed out of

the workplace.

P280 Wear protective gloves.

P284 In case of inadequate ventilation wear respiratory protec-

tion.

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.

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

attention.

P342 + P311 If experiencing respiratory symptoms: Call a

POISON CENTER/ doctor.

P362 + P364 Take off contaminated clothing and wash it before

reuse.

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)
Stoddard solvent	8052-41-3	Flam. Liq. 3; H226	>= 1 - < 5
		STOT SE 3; H336	
		STOT RE 1; H372	
		Asp. Tox. 1; H304	
Aliphatic polyisocyanate	28182-81-2	Acute Tox. 4; H332	>= 0.1 - < 1
		Skin Sens. 1; H317	
		STOT SE 3; H335	
4,4'-methylenediphenyl diisocyanate	101-68-8	Acute Tox. 4; H332	>= 0.1 - < 1
		Skin Irrit. 2; H315	
		Eye Irrit. 2B; H320	
		Resp. Sens. 1; H334	
		Skin Sens. 1; H317	
		STOT SE 3; H335	



# Sikaflex®-220+

Revision Date 10/24/2023 Print Date 10/24/2023

		STOT RE 2; H373	
3-isocyanatomethyl-3,5,5-	4098-71-9	Acute Tox. 1; H330	>= 0.1 - < 1
trimethylcyclohexyl isocyanate		Skin Corr. 1C; H314	
		Eye Dam. 1; H318	
		Resp. Sens. 1; H334	
		Skin Sens. 1; H317	
		STOT SE 3; H335	

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.

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
Asthmatic appearance
Allergic reactions

May cause an allergic skin reaction.

May cause allergy or asthma symptoms or breathing difficul-

ties if inhaled.

Causes damage to organs through prolonged or repeated

exposure if inhaled.

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



# Sikaflex®-220+

Revision Date 10/24/2023 Print Date 10/24/2023

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**

Personal precautions, protective equipment and emer-

gency procedures

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

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 : Keep container tightly closed in a dry and well-ventilated

piace.

Store in accordance with local regulations.

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

Ingredients with workplace control parameters

according to the Hazardous Products Regulations



# Sikaflex®-220+

Revision Date 10/24/2023 Print Date 10/24/2023

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
Stoddard solvent	8052-41-3	TWA	100 ppm 572 mg/m3	CA AB OEL
		TWA	290 mg/m3	CA BC OEL
		STEL	580 mg/m3	CA BC OEL
		TWAEV	100 ppm 525 mg/m3	CA QC OEL
		TWA	525 mg/m3	CA ON OEL
		TWA	100 ppm	ACGIH
Aliphatic polyisocyanate	28182-81-2	TWA	0.005 ppm	CA BC OEL
		С	0.01 ppm	CA BC OEL
4,4'-methylenediphenyl diiso- cyanate	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
		TWAEV	0.005 ppm 0.051 mg/m3	CA QC OEL
		TWA	0.005 ppm	ACGIH
3-isocyanatomethyl-3,5,5- trimethylcyclohexyl isocyanate	4098-71-9	TWA	0.005 ppm 0.05 mg/m3	CA AB OEL
		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
		TWAEV	0.005 ppm 0.045 mg/m3	CA QC OEL

**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 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-



# Sikaflex®-220+

Revision Date 10/24/2023 Print Date 10/24/2023

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 : black

Odor : very faint

Odor Threshold : No data available

pH : Not applicable

Melting point/range / Freezing :

Boiling point/boiling range

point

\_

No data available

No data available

Flash point : Not applicable

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 : 1.19 g/cm3 (20 °C (68 °F))

Solubility(ies)



# Sikaflex®-220+

Revision Date 10/24/2023 Print Date 10/24/2023

Water solubility : insoluble

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 :  $> 20.5 \text{ mm2/s} (40 ^{\circ}\text{C} (104 ^{\circ}\text{F}))$ 

Explosive properties : No data available

Oxidizing properties : No data available

Volatile organic compounds

(VOC) content

64.1 g/l

## **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

Hazardous decomposition

products

No decomposition if stored and applied as directed.

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

#### **Acute toxicity**

Not classified based on available information.

### **Components:**

## Aliphatic polyisocyanate:

Acute oral toxicity : LD50 Oral (Rat): > 2,500 mg/kg

Acute inhalation toxicity : LC50: 1.5 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

according to the Hazardous Products Regulations



# Sikaflex®-220+

Revision Date 10/24/2023 Print Date 10/24/2023

Method: Expert judgment

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

4,4'-methylenediphenyl diisocyanate:

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

Method: OECD Test Guideline 401

Acute inhalation toxicity : LC50: 1.5 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist Method: Expert judgment

3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate:

Acute oral toxicity : LD50 Oral (Rat): 4,814 mg/kg

Acute inhalation toxicity : LC50 (Rat): 0.031 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

Acute dermal toxicity : LD50 Dermal (Rat): > 7,000 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

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Germ cell mutagenicity

Not classified based on available information.

Carcinogenicity

Not classified based on available information.

IARC Group 2B: Possibly carcinogenic to humans

Carbon black, amorphous 1333-86-4

OSHA Not applicable

NTP Not applicable

Reproductive toxicity

Not classified based on available information.

according to the Hazardous Products Regulations



## Sikaflex®-220+

Revision Date 10/24/2023 Print Date 10/24/2023

#### STOT-single exposure

Not classified based on available information.

### STOT-repeated exposure

Causes damage to organs (Central nervous system) through prolonged or repeated exposure if inhaled.

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

### **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**

## **International Regulations**

#### **IATA-DGR**

Not regulated as a dangerous good

according to the Hazardous Products Regulations



## Sikaflex®-220+

Revision Date 10/24/2023 Print Date 10/24/2023

#### **IMDG-Code**

Not regulated as a dangerous good

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

Not applicable for product as supplied.

#### **Domestic regulation**

#### **TDG**

Not regulated as a dangerous good

## **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)

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

CA BC OEL / C : ceiling limit
CA ON OEL / C : Ceiling Limit (C)

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

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)

according to the Hazardous Products Regulations



# Sikaflex®-220+

Revision Date 10/24/2023 Print Date 10/24/2023

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

#### 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.

Revision Date : 10/24/2023 Date format : mm/dd/yyyy

Prepared by : R & D of Sika Canada Inc.

Material number : 404,965

CA / Z8