# Sikaflex®-291



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#### **SECTION 1. PRODUCT AND COMPANY IDENTIFICATION**

Product name : Sikaflex®-291

Manufacturer or supplier's details

Company Sika Australia Pty. Ltd.

55 Elizabeth Street Wetherill Park, NSW 2164

Telephone : +61 2 9725 11 45

Emergency telephone number: +61 1800 033 111

Telefax +61 2 9725 33 30

Recommended use of the chemical and restrictions on use

Product use : Sealant/adhesive

## **SECTION 2. HAZARDS IDENTIFICATION**

**GHS Classification** 

Flammable liquids : Category 4

repeated exposure (Inhala-

tion)

Specific target organ toxicity - : Category 2 (Central nervous system)

#### **GHS** label elements

Hazard pictograms

Signal word

Hazard statements H227 Combustible liquid.

H373 May cause damage to organs (Central nervous system)

through prolonged or repeated exposure if inhaled.

Precautionary statements **Prevention:** 

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

and other ignition sources. No smoking. P260 Do not breathe mist or vapours.

P280 Wear protective gloves/ protective clothing/ eye protec-

tion/ face protection/ hearing protection.

Response:

P314 Get medical advice/ attention if you feel unwell.

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P370 + P378 In case of fire: Use dry sand, dry chemical or

alcohol-resistant foam to extinguish.

Storage:

P403 Store in a well-ventilated place.

Disposal:

P501 Dispose of contents/ container to an approved waste

disposal plant.

Other hazards which do not result in classification

None known.

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

Substance / Mixture : Mixture

# Components

Chemical name	CAS-No.	Concentration (% w/w)
Urea,N,N"-(methylenedi-4,1-phenylene)bis[N'-	77703-56-1	>= 2.5 -< 10
butyl-		
xylene	1330-20-7	>= 0.25 -< 2.5
Stoddard solvent	8052-41-3	>= 1 -< 2.5
4,4'-methylenediphenyl diisocyanate	101-68-8	0 -< 1

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

General advice : Move out of dangerous area.

Consult a physician.

Show this safety data sheet to the doctor in attendance.

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 give milk or alcoholic beverages.

Never give anything by mouth to an unconscious person.

Most important symptoms

and effects, both acute and

delayed

No known significant effects or hazards.

See Section 11 for more detailed information on health effects

and symptoms.

May cause damage to organs through prolonged or repeated

exposure if inhaled.

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Notes to physician Treat symptomatically.

#### **SECTION 5. FIREFIGHTING MEASURES**

Suitable extinguishing media : Carbon dioxide (CO2)

Unsuitable extinguishing

media

Water

Hazardous combustion prod: :

ucts

No hazardous combustion products are known

Specific extinguishing meth-

Standard procedure for chemical fires.

Special protective equipment:

for firefighters

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 Try to prevent the material from entering drains or water

courses.

No special environmental precautions required.

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.

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

section 8).

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

Smoking, eating and drinking should be prohibited in the ap-

plication area.

Follow standard hygiene measures when handling chemical

products

Handle in accordance with good industrial hygiene and safety Hygiene measures

practice.

When using do not eat or drink.

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When using do not smoke.

Wash hands before breaks and at the end of workday.

Conditions for safe storage : Store in original container.

Keep in a well-ventilated place. Observe label precautions.

Store in accordance with local regulations.

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

## Components with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis	
xylene	1330-20-7	STEL	150 ppm 655 mg/m3	AU OEL	
		TWA	80 ppm 350 mg/m3	AU OEL	
Stoddard solvent	8052-41-3	TWA	790 mg/m3	AU OEL	
	Further information: Category 1B (Carc. 1B) Presumed to have carcinogenic potential for humans				
4,4'-methylenediphenyl diiso- cyanate	101-68-8	TWA	0.02 mg/m3 (NCO)	AU OEL	
	Further information: Category 2 (Carc. 2) Suspected human carcinogen, Sensitiser				
		STEL	0.07 mg/m3 (NCO)	AU OEL	

## **Biological occupational exposure limits**

Components	CAS-No.	Control	Biological	Sampling	Permissible	Basis
		parameters	specimen	time	concentration	
xylene	1330-20-7	Methylhip- puric acids	Urine	End of shift (As soon as possible after ex- posure ceases)	1.5 g/g creat- inine	ACGIH BEI

Appropriate engineering

controls

Use adequate ventilation and/or engineering controls to pre-

vent exposure to vapours.

Personal protective equipment

Respiratory protection : In case of inadequate ventilation wear respiratory protection.

Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe

working limits of the selected respirator.

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.

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Follow AS/NZS 1337.1

Recommended: Butyl rubber/nitrile rubber gloves.

Contaminated gloves should be removed.

Eye protection : Safety glasses

Skin and body protection : Protective clothing (e.g. safety shoes, long-sleeved working

clothing, long trousers) Follow AS 2210:3

Protective clothing needs to be made of cotton.

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

Appearance : paste

Colour : various

Odour : characteristic

Odour Threshold : No data available

pH : Not applicable

Melting point/ range / Freez-

ing point

Boiling point/boiling range

No data available

: No data available

Flash point : ca. 64.6 °C (148.3 °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

Vapour pressure : 0.01 hPa

Relative vapour density : No data available

Density : 1.26 g/cm3 (23 °C (73 °F))

Solubility(ies)

Water solubility : insoluble

Solubility in other solvents : No data available

Partition coefficient: n- : No data available

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octanol/water

Auto-ignition temperature : No data available

Decomposition temperature : No data available

Viscosity

Viscosity, dynamic : No data available

Viscosity, kinematic : ca.  $> 20.5 \text{ mm2/s} (40 ^{\circ}\text{C} (104 ^{\circ}\text{F}))$ 

Explosive properties : No data available

Oxidizing properties : No data available

Volatile organic compounds : Directive 2010/75/EU of 24 November 2010 on industrial and

livestock rearing emissions (integrated pollution prevention

and control)

Volatile organic compounds (VOC) content: 4.1% w/w

#### **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

No hazards to be specially mentioned.

Conditions to avoid : No data available

Incompatible materials : see section 7.

Hazardous decomposition

products

: No hazardous decomposition products are known.

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

## **Acute toxicity**

Not classified due to lack of data.

#### **Components:**

xylene:

Acute oral toxicity : LD50 Oral (Rat): 3,523 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

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Method: Expert judgement

#### Skin corrosion/irritation

Not classified due to lack of data.

## Serious eye damage/eye irritation

Not classified due to lack of data.

## Respiratory or skin sensitisation

#### Skin sensitisation

Not classified due to lack of data.

## Respiratory sensitisation

Not classified due to lack of data.

# **Chronic toxicity**

## Germ cell mutagenicity

Not classified due to lack of data.

## Carcinogenicity

Not classified due to lack of data.

### Reproductive toxicity

Not classified due to lack of data.

#### STOT - single exposure

Not classified due to lack of data.

## STOT - repeated exposure

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

# **Aspiration toxicity**

Not classified due to lack of data.

# **SECTION 12. ECOLOGICAL INFORMATION**

#### **Ecotoxicity**

#### **Components:**

## Urea,N,N"-(methylenedi-4,1-phenylene)bis[N'-butyl-:

: LC50 (Brachydanio rerio (zebrafish)): > 250 mg/l Toxicity to fish

Exposure time: 96 h

aquatic invertebrates

Toxicity to daphnia and other : EC50 (Daphnia magna (Water flea)): > 100 mg/l

Exposure time: 48 h

Toxicity to algae/aquatic

plants

EC50 (Raphidocelis subcapitata (freshwater green alga)): >

100 mg/l

Exposure time: 72 h

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xylene:

Toxicity to fish (Chronic tox-

icitv`

NOEC (Oncorhynchus mykiss (rainbow trout)): > 1.3 mg/l

Exposure time: 56 d

Toxicity to daphnia and other : aquatic invertebrates (Chron-

ic toxicity)

NOEC (Daphnia (water flea)): 1.17 mg/l

Exposure time: 7 d

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

There is no data available for this product.

#### **SECTION 13. DISPOSAL CONSIDERATIONS**

**Disposal methods** 

Waste from residues : Send to a licensed waste management company.

Do not contaminate ponds, waterways or ditches with chemi-

cal or used container.

Contaminated packaging : Empty remaining contents.

Dispose of as unused product.

Do not re-use empty containers.

Do not burn, or use a cutting torch on, the empty drum.

#### **SECTION 14. TRANSPORT INFORMATION**

## **International Regulations**

IATA-DGR

UN/ID No. : Not applicable
Proper shipping name : Not applicable
Class : Not applicable
Subsidiary risk : Not applicable
Packing group : Not applicable
Labels : Not applicable
Packing instruction (cargo : Not applicable

aircraft)

Packing instruction (passen-

ger aircraft)

Not applicable

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**IMDG-Code** 

**UN** number Not applicable Not applicable Proper shipping name Not applicable Class Not applicable Subsidiary risk Not applicable Packing group Not applicable Labels Not applicable **EmS Code** Not applicable Marine pollutant

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

Not applicable for product as supplied.

### **National Regulations**

**ADG** 

**UN** number Not applicable Proper shipping name Not applicable Class Not applicable Subsidiary risk Not applicable Not applicable Packing group Labels Not applicable Hazchem Code Not applicable

Special precautions for user

Not applicable

## **SECTION 15. REGULATORY INFORMATION**

Safety, health and environmental regulations/legislation specific for the substance or mixture

Standard) Instrument

Therapeutic Goods (Poisons : No poison schedule number allocated (Please use the original publication to check for specific uses, specific conditions or

threshold limits that might apply for this chemical)

International Chemical Weapons Convention (CWC)

Schedules of Toxic Chemicals and Precursors

Prohibition/Licensing Requirements

: Not applicable

There is no applicable prohibition, authorisation and restricted use requirements, including for carcinogens referred to in Schedule 10 of the model WHS Act and Regula-

tions.

The components of this product are reported in the following inventories:

: On the inventory, or in compliance with the inventory AIIC

#### SECTION 16. OTHER INFORMATION

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Full text of other abbreviations

ACGIH BEI : ACGIH - Biological Exposure Indices (BEI)

AU OEL : Australia. Workplace Exposure Standards for Airborne Con-

taminants.

AU OEL / TWA : Exposure standard - time weighted average AU OEL / STEL : Exposure standard - short term exposure limit

ADG : Australian Dangerous Goods Code.

ADR : European Agreement concerning the International Carriage of

Dangerous Goods by Road

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 European Chemicals Agency

SVHC : Substances of Very High Concern

vPvB : Very persistent and very bioaccumulative

Safety Data Sheets are updated frequently. Please ensure that you have a current copy. SDS may be obtained from the following website: aus.sika.com

The information contained in this Safety Data Sheet corresponds to our level of knowledge at the time of publication. All warranties are excluded. Our most current General Sales Conditions shall apply. Please consult the product data sheet prior to any use and processing.

Changes as compared to previous version!

AU / EN