

# SAFETY DATA SHEET

## Sikaflex®-291



Version 1.0

MSDS Number: 000000029841

Revision Date: 2016/02/05

### 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Sikaflex®-291  
Product code : 000000029841  
Type of product : liquid

#### Recommended use of the chemical and restrictions on use

Product use : Sealant/adhesive

#### Manufacturer or supplier's details

Company : Sika (Thailand) Limited  
700/37 Moo. 5 Amata Nakorn Estate  
Bangna-Trad Km.57  
Tambol Klong Tamhru  
Muang District  
Chonburi 20000  
Thailand

Telephone : +66 3810 9500

Emergency telephone number : +66 3821 4270-85

Telefax : +66 3821 4286

E-mail address : Sikathai@th.sika.com

### 2. HAZARDS IDENTIFICATION


#### GHS Classification

Flammable liquids : Category 4

Skin corrosion/irritation : Category 3

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

#### GHS Label element

Hazard pictograms : 

Signal word : Warning

Hazard statements : H227 Combustible liquid.  
H316 Causes mild skin irritation.  
H373 May cause damage to organs (Central nervous system) through prolonged or repeated exposure if inhaled.

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Precautionary statements : **Prevention:**  
P210 Keep away from heat/sparks/open flames/hot surfaces.  
No smoking.  
P260 Do not breathe dust/ fume/ gas/ mist/ vapours/ spray.  
P280 Wear protective gloves/ eye protection/ face protection.  
**Response:**  
P314 Get medical advice/ attention if you feel unwell.  
P332 + P313 If skin irritation occurs: Get medical advice/ attention.  
P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.  
**Storage:**  
P403 + P235 Store in a well-ventilated place. Keep cool.  
**Disposal:**  
P501 Dispose of contents/ container to an approved waste disposal plant.

### Other hazards which do not result in classification

None known.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

#### Hazardous components

Chemical Name	CAS-No.	Concentration (%)
xylene	1330-20-7	>= 1 - < 10
Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%)	64742-82-1	>= 1 - < 10
4,4'-methylenediphenyl diisocyanate	101-68-8	>= 0.1 - < 1

### 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 : No known significant effects or hazards.

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and effects, both acute and delayed

See Section 11 for more detailed information on health effects and symptoms.  
Causes mild skin irritation.  
May cause damage to organs through prolonged or repeated exposure if inhaled.

Notes to physician

: Treat symptomatically.

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### 5. FIREFIGHTING MEASURES

Suitable extinguishing media : Carbon dioxide (CO<sub>2</sub>)

Unsuitable extinguishing media : Water

Hazardous combustion products : No hazardous combustion products are known

Specific extinguishing methods : Standard procedure for chemical fires.

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

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### 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures : Use personal protective equipment.  
Deny access to unprotected persons.

Environmental precautions : Try to prevent the material from entering drains or water courses.

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.

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### 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.  
Smoking, eating and drinking should be prohibited in the application area.  
Follow standard hygiene measures when handling chemical products

Conditions for safe storage : Store in original container.  
Keep in a well-ventilated place.

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Observe label precautions.  
Store in accordance with local regulations.

### 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	TWA	100 ppm 435 mg/m <sup>3</sup>	TH OEL
		TWA	100 ppm	ACGIH
		STEL	150 ppm	ACGIH
4,4'-methylenediphenyl diisocyanate	101-68-8	CEIL	0.02 ppm 0.2 mg/m <sup>3</sup>	TH OEL
		TWA	0.005 ppm	ACGIH

#### Personal protective equipment

- Respiratory protection : Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines. The filter class for the respirator must be suitable for the maximum expected contaminant concentration (gas/vapour/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 necessary.
- 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 concentration and amount of dangerous substances, and to the specific work-place.
- Hygiene measures : Handle in accordance with good industrial hygiene and safety practice.  
When using do not eat or drink.  
When using do not smoke.  
Wash hands before breaks and at the end of workday.

### 9. PHYSICAL AND CHEMICAL PROPERTIES

- Appearance : paste
- Colour : various
- Odour : characteristic

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Odour 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	: 76 °C (169 °F) Method: closed cup
Evaporation rate	: No data available
Flammability	: No data available
Upper explosion limit	: No data available
Lower explosion limit	: No data available
Vapour pressure	: No data available
Relative vapour density	: No data available
Density	: ca. 1.26 g/cm <sup>3</sup> (20 °C (68 °F) ( ))
Solubility(ies)	
Water solubility	: insoluble
Partition coefficient: n-octanol/water	: No data available
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity	
Viscosity, dynamic	: Not applicable
Viscosity, kinematic	: > 20.5 mm <sup>2</sup> /s (40 °C)
Molecular weight	: No data available

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### 10. STABILITY AND REACTIVITY

Reactivity	: No dangerous reaction known under conditions of normal use.
Chemical stability	: The product is chemically stable.
Possibility of hazardous reactions	: Stable under recommended storage conditions.
Conditions to avoid	: No data available

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Incompatible materials : No data available

Hazardous decomposition products : No decomposition if stored and applied as directed.

### 11. TOXICOLOGICAL INFORMATION

#### Acute toxicity

Not classified based on available information.

#### Components:

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

Acute inhalation toxicity : Acute toxicity estimate: 1.5 mg/l  
Test atmosphere: dust/mist  
Method: Expert judgement

#### **Skin corrosion/irritation**

Causes mild skin irritation.

#### **Serious eye damage/eye irritation**

Not classified based on available information.

#### **Respiratory or skin sensitisation**

Skin sensitisation: Not classified based on available information.

Respiratory sensitisation: Not classified based on available information.

#### **Germ cell mutagenicity**

Not classified based on available information.

#### **Carcinogenicity**

Not classified based on available information.

#### **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 (Central nervous system) through prolonged or repeated exposure if inhaled.

#### **Aspiration toxicity**

Not classified based on available information.

### 12. ECOLOGICAL INFORMATION

#### **Ecotoxicity**

No data available

#### **Persistence and degradability**

No data available

#### **Bioaccumulative potential**

No data available

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### Mobility in soil

No data available

### Other adverse effects

#### Product:

Additional ecological information : There is no data available for this product.

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## 13. DISPOSAL CONSIDERATIONS

### Disposal methods

- Waste from residues : Do not contaminate ponds, waterways or ditches with chemical or used container.  
Send to a licensed waste management company.
- 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.

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## 14. TRANSPORT INFORMATION

### International Regulation

#### **UNRTDG**

Not dangerous goods

#### **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.

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## 15. REGULATORY INFORMATION

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

- International Chemical Weapons Convention (CWC) Schedules of Toxic Chemicals and Precursors : Not applicable
- Hazardous Substance Act B.E. 2535 : Not applicable
- Emergency Decree on Controlling the Use of Volatile Substances B.E. 2533 : Not applicable
- Notification of Ministry of Interior on Working Safety Relating to Hazardous Chemicals B.E. 2534 : Limestone  
titanium dioxide  
xylene

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## 16. OTHER INFORMATION

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Date format : yyyy/mm/dd

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.