

SAFETY DATA SHEET

Sikaflex®-221 LV



Version
1.1

Revision Date:
2026/09/24

SDS Number:
100000024169

Date of last issue: 2024/09/04
Date of first issue: 2024/09/04

1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Sikaflex®-221 LV

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 (38) 109 500 Ext.1909

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

Telefax : +66 3821 4286

2. HAZARDS IDENTIFICATION

GHS Classification

Flammable liquids : Category 4

Skin corrosion/irritation : Category 3

GHS label elements

Hazard pictograms : None

Signal word : Warning

Hazard statements : H227 Combustible liquid.
H316 Causes mild skin irritation.

Precautionary statements : **Prevention:**
P210 Keep away from heat/ sparks/ open flames/ hot surfaces.
No smoking.
P280 Wear protective gloves/ eye protection/ face protection.
Response:
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.

SAFETY DATA SHEET

Sikaflex®-221 LV



Version
1.1

Revision Date:
2026/09/24

SDS Number:
100000024169

Date of last issue: 2024/09/04
Date of first issue: 2024/09/04

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

Components

Chemical name	CAS-No.	Concentration (% w/w)
Urea,N,N''-(methylenedi-4,1-phenylene)bis[N'-butyl-	77703-56-1	≥ 2.5 -< 10
xylene	1330-20-7	≥ 1 -< 2.5
4,4'-methylenediphenyl diisocyanate	101-68-8	≥ 0.1 -< 1

4. FIRST AID MEASURES

- General advice : No hazards which require special first aid measures.
- 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 : Flush eyes with water as a precaution.
Remove contact lenses.
Keep eye wide open while rinsing.
- 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.
Causes mild skin irritation.
- Notes to physician : Treat symptomatically.

5. FIREFIGHTING MEASURES

SAFETY DATA SHEET

Sikaflex®-221 LV



Version
1.1

Revision Date:
2026/09/24

SDS Number:
100000024169

Date of last issue: 2024/09/04
Date of first issue: 2024/09/04

Suitable extinguishing media : Carbon dioxide (CO₂)

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.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures : For personal protection see section 8.

Environmental precautions : No special environmental precautions required.

Methods and materials for containment and cleaning up : Wipe up with absorbent material (e.g. cloth, fleece).
Keep in suitable, closed containers for disposal.

7. HANDLING AND STORAGE

Advice on protection against fire and explosion : Normal measures for preventive fire protection.

Advice on safe handling : Do not get in eyes, on skin, or on clothing.
For personal protection see section 8.
Follow standard hygiene measures when handling chemical products

Conditions for safe storage : Store in original container.
Keep in a well-ventilated place.
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 reaction mass of ethylbenzene and xylene	1330-20-7	TWA	100 ppm	TH OEL

SAFETY DATA SHEET

Sikaflex®-221 LV



Version
1.1

Revision Date:
2026/09/24

SDS Number:
100000024169

Date of last issue: 2024/09/04
Date of first issue: 2024/09/04

		TWA	20 ppm	ACGIH
4,4'-methylenediphenyl diisocyanate	101-68-8	TWA	0.005 ppm	ACGIH

Biological occupational exposure limits

Components	CAS-No.	Control parameters	Biological specimen	Sampling time	Permissible concentration	Basis
xylene	1330-20-7	Methylhippuric acids	Urine	End of shift (As soon as possible after exposure ceases)	0.3 g/g creatinine	ACGIH BEI

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

SAFETY DATA SHEET

Sikaflex®-221 LV



Version
1.1

Revision Date:
2026/09/24

SDS Number:
100000024169

Date of last issue: 2024/09/04
Date of first issue: 2024/09/04

Odour Threshold	: No data available
pH	: Not applicable
Melting point/ range / Freezing point	: No data available
Boiling point/boiling range	: No data available
Flash point	: > 70 °C (158 °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	: ca. 1.3 g/cm ³ (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
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Viscosity	
Viscosity, dynamic	: > 20.5 Pa.s (20 °C (68 °F))
Viscosity, kinematic	: No data available
Explosive properties	: No data available
Oxidizing properties	: No data available

10. STABILITY AND REACTIVITY

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

SAFETY DATA SHEET

Sikaflex®-221 LV



Version
1.1

Revision Date:
2026/09/24

SDS Number:
100000024169

Date of last issue: 2024/09/04
Date of first issue: 2024/09/04

Chemical stability : The product is chemically stable.

Possibility of hazardous reactions : No hazards to be specially mentioned.

Conditions to avoid : No data available

Incompatible materials : No data available

Hazardous decomposition products : No hazardous decomposition products are known.

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Not classified due to lack of data.

Product:

Acute inhalation toxicity : Acute toxicity estimate: > 40 mg/l
Exposure time: 4 h
Test atmosphere: vapour
Method: Calculation method

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

Components:

xylene:

reaction mass of ethylbenzene and 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
Method: Expert judgement

Skin corrosion/irritation

Causes mild skin irritation.

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.

SAFETY DATA SHEET

Sikaflex®-221 LV



Version
1.1

Revision Date:
2026/09/24

SDS Number:
100000024169

Date of last issue: 2024/09/04
Date of first issue: 2024/09/04

Respiratory sensitisation

Not classified due to lack of data.

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

Not classified due to lack of data.

Aspiration toxicity

Not classified due to lack of data.

12. ECOLOGICAL INFORMATION

Ecotoxicity

Components:

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

Toxicity to fish : LC50 (Brachydanio rerio (zebrafish)): > 250 mg/l
Exposure time: 96 h

Toxicity to daphnia and other : EC50 (Daphnia magna (Water flea)): > 100 mg/l
aquatic invertebrates Exposure time: 48 h

Toxicity to algae/aquatic : EC50 (Raphidocelis subcapitata (freshwater green alga)): >
plants 100 mg/l
Exposure time: 72 h

xylene:

reaction mass of ethylbenzene and xylene:

Toxicity to fish (Chronic tox- : NOEC (Oncorhynchus mykiss (rainbow trout)): > 1.3 mg/l
icity) Exposure time: 56 d

Toxicity to daphnia and other : NOEC (Daphnia (water flea)): 1.17 mg/l
aquatic invertebrates (Chron- Exposure time: 7 d
ic toxicity)

Persistence and degradability

No data available

Bioaccumulative potential

No data available

SAFETY DATA SHEET

Sikaflex®-221 LV



Version
1.1

Revision Date:
2026/09/24

SDS Number:
100000024169

Date of last issue: 2024/09/04
Date of first issue: 2024/09/04

Mobility in soil

No data available

Other adverse effects

Product:

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

Components:

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

Results of PBT and vPvB assessment : Not persistent, bioaccumulative, and toxic (PBT).

13. DISPOSAL CONSIDERATIONS

Disposal methods

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

Do not contaminate ponds, waterways or ditches with chemical 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.

14. TRANSPORT INFORMATION

International Regulations

UNRTDG

Not regulated as a dangerous good

UN number : Not applicable
Proper shipping name : Not applicable
Class : Not applicable
Subsidiary risk : Not applicable
Packing group : Not applicable
Labels : Not applicable
Environmentally hazardous : no

IATA-DGR

Not regulated as a dangerous good

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

SAFETY DATA SHEET

Sikaflex®-221 LV



Version
1.1

Revision Date:
2026/09/24

SDS Number:
100000024169

Date of last issue: 2024/09/04
Date of first issue: 2024/09/04

Labels : Not applicable
Packing instruction (cargo aircraft) : Not applicable
Packing instruction (passenger aircraft) : Not applicable

IMDG-Code

Not regulated as a dangerous good
UN number : 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 : Not applicable

Special precautions for user

Not applicable

15. REGULATORY INFORMATION

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

Hazardous Substance Act : Conditions of restriction for the following entries must be considered:
Not applicable

Emergency Decree on Controlling the Use of Volatile Substances : Not applicable

The Arms Control Act B.E. 2530 : Not applicable

International Chemical Weapons Convention (CWC) : Not applicable
Schedules of Toxic Chemicals and Precursors

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: 2.2% w/w

16. OTHER INFORMATION

Revision Date : 2026/09/24
Date format : yyyy/mm/dd

Full text of other abbreviations

ACGIH : USA. ACGIH Threshold Limit Values (TLV)
ACGIH BEI : ACGIH - Biological Exposure Indices (BEI)
TH OEL : Thailand. Occupational Exposure Limits

ACGIH / TWA : 8-hour, time-weighted average

SAFETY DATA SHEET

Sikaflex®-221 LV



Version
1.1

Revision Date:
2026/09/24

SDS Number:
100000024169

Date of last issue: 2024/09/04
Date of first issue: 2024/09/04

TH OEL / TWA	: Time weighted average
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 dose (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

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.

TH / EN