SAFETY DATA SHEET

Sikaflex®-591

Version	Revision Date:	SDS Number:	Date of last issue: -
1.0	08.10.2026	100000009489	Date of first issue: 08.10.2026

Section 1: Identification

Product name : Sikaflex®-591

Manufacturer or supplier's details

Company : Sika (NZ) Ltd.
85-91 Patiki Road
Avondale
Auckland AKL 1026

Telephone : +64 9 820 2900

Emergency telephone number : 0800 734 607

E-mail address : info@nz.sika.com

Telefax : +64 9 828 4091

Recommended use of the chemical and restrictions on use

Product use : Sealant/adhesive

Section 2: Hazard identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Not a hazardous substance or mixture according to Regulation (EC) No. 1272/2008.

Additional Labelling

EUH208	Contains Pentamethylpiperidinol-substituted polyester, trimethoxyvinylsilane, 2-octyl-2H-isothiazole-3-one (OIT). May produce an allergic reaction.
EUH211	Warning! Hazardous respirable droplets may be formed when sprayed. Do not breathe spray or mist.

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Ecological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Toxicological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Contains a biocide in order to protect the product. Active ingredient: 2-octyl-2H-isothiazole-3-one (OIT), 26530-20-1. Please use treated articles responsibly.

Section 3: Composition/information on ingredients

3.2 Mixtures

Components

Chemical name	CAS-No. EC-No. Index-No. Registration number	Classification	Concentration (% w/w)
distillates (petroleum), hydrotreated light paraffinic	64742-55-8 265-158-7 649-468-00-3 01-2119487077-29-XXXX	Asp. Tox. 1; H304 EUH066	>= 2.5 - < 5
Pentamethylpiperidinol-substituted polyester	85631-00-1 287-947-5 01-2120771539-41-XXXX	Acute Tox. 4; H302 Eye Irrit. 2; H319 Skin Sens. 1; H317 Aquatic Chronic 4; H413 M-Factor (Acute aquatic toxicity): 1 M-Factor (Chronic aquatic toxicity): 1 Acute toxicity estimate Acute oral toxicity: 1,900 mg/kg	>= 0.25 - < 0.5
trimethoxyvinylsilane Contains: tetramethyl orthosilicate <= 0.2 %	2768-02-7 220-449-8 014-049-00-0 01-2119513215-52-XXXX	Flam. Liq. 3; H226 Acute Tox. 4; H332 Skin Sens. 1B; H317 Acute toxicity estimate Acute inhalation toxicity (vapour): 16.8 mg/l	>= 0.1 - < 0.5

2-octyl-2H-isothiazole-3-one (OIT)	26530-20-1 247-761-7 613-112-00-5 01-2120768921-45-XXXX	Acute Tox. 3; H301 Acute Tox. 2; H330 Acute Tox. 3; H311 Skin Corr. 1; H314 Eye Dam. 1; H318 Skin Sens. 1A; H317 Aquatic Acute 1; H400 Aquatic Chronic 1; H410 EUH071 M-Factor (Acute aquatic toxicity): 100 M-Factor (Chronic aquatic toxicity): 100 specific concentration limit Skin Sens. 1A; H317 >= 0.0015 % Acute toxicity esti-mate Acute oral toxicity: 125 mg/kg Acute inhalation tox-icity (dust/mist): 0.27 mg/l Acute dermal toxicity: 311 mg/kg	>= 0.0002 - < 0.0015

For explanation of abbreviations see section 16.

Section 4: First-aid measures

4.1 Description of first aid measures

General advice : No hazards which require special first aid measures.

If inhaled : Move to fresh air.

In case of skin contact : Take off contaminated clothing and shoes immediately.
Wash off with soap and plenty of water.

In case of eye contact : Remove contact lenses.
Keep eye wide open while rinsing.

If swallowed : Do not induce vomiting without medical advice.
Rinse mouth with water.

Do not give milk or alcoholic beverages.
Never give anything by mouth to an unconscious person.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms : See Section 11 for more detailed information on health effects and symptoms.

Risks : No known significant effects or hazards.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment : Treat symptomatically.

Section 5: Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media : In case of fire, use water/water spray/water jet/carbon dioxide/sand/foam/alcohol resistant foam/chemical powder for extinction.

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products : No hazardous combustion products are known

5.3 Advice for firefighters

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

Further information : Standard procedure for chemical fires.

Section 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : For personal protection see section 8.

6.2 Environmental precautions

Environmental precautions : No special environmental precautions required.

6.3 Methods and material for containment and cleaning up

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

6.4 Reference to other sections

For personal protection see section 8.

Section 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling : For personal protection see section 8.
No special handling advice required.
Follow standard hygiene measures when handling chemical products

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

Hygiene measures : When using do not eat or drink. When using do not smoke.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Keep container tightly closed in a dry and well-ventilated place. Store in accordance with local regulations.

Advice on common storage : No special restrictions on storage with other products.

Further information on storage stability : No decomposition if stored and applied as directed.

7.3 Specific end use(s)

Specific use(s) : Consult most current local Product Data Sheet prior to any use.

Section 8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters *	Basis *
distillates (petroleum), hydrotreated light paraffinic	64742-55-8	TWA (inhalable fraction)	5 mg/m3	CH SUVA
	Further information: See 1.9.6: Lubricants and mineral oil, Carcinogenic classification C2 applies for use, Carcinogenic Category 3, National Institute for Occupational Safety and Health, German Research Foundation			
2-octyl-2H-isothiazole-3-one (OIT)	26530-20-1	TWA (inhalable dust)	0.05 mg/m3	CH SUVA
	Further information: Toxic by skin resorption possible; Substances, which are easily absored through the skin, can give by additional skin resoption a substancial higher risk compared to only inhalation by the airways., Sensitizers; Substances marked with an S can lead to very strong allergic reactions.			
		STEL (inhalable dust)	0.1 mg/m3	CH SUVA

*The above mentioned values are in accordance with the legislation in effect at the date of the re-

lease of this safety data sheet.

Occupational exposure limits of decomposition products

Components	CAS-No.	Value type (Form of exposure)	Control parameters *	Basis *
methanol	67-56-1	TWA	200 ppm 260 mg/m3	2006/15/EC
	Further information: Indicative, Identifies the possibility of significant uptake through the skin			
		TWA	200 ppm 260 mg/m3	CH SUVA
	Further information: Toxic by skin resorption possible; Substances, which are easily absored through the skin, can give by additional skin resoption a substancial higher risk compared to only inhalation by the airways., National Institute for Occupational Safety and Health, National Institute of Research and Safety for the prevention of work accidents and occupational diseases, Harm to the unborn child is not to be expected when the OEL-value is respected			
		STEL	400 ppm 520 mg/m3	CH SUVA

*The above mentioned values are in accordance with the legislation in effect at the date of the release of this safety data sheet.

Biological occupational exposure limits of decomposition products.

Substance name	CAS-No.	Control parameters	Sampling time	Basis
methanol	67-56-1	Methanol: 30 mg/l (Urine)	Immediately after exposure or after working hours, In case of long-term exposure: after more than one shift	CH BAT
		Methanol: 936 micromol per litre (Urine)	Immediately after exposure or after working hours, In case of long-term exposure: after more than one shift	CH BAT

8.2 Exposure controls

Appropriate engineering controls

Maintain air concentrations below occupational exposure standards.
Ensure adequate ventilation, especially in confined areas.

Individual protection measures, such as personal protective equipment (PPE)

Eye/face protection : Safety glasses

Hand protection : Chemical-resistant, impervious gloves complying with an approved standard must be worn at all times when handling chemical products. Reference number EN 374. Follow manufacturer specifications.
Butyl rubber/nitrile rubber gloves (> 0,1 mm)
Recommended: Butyl rubber/nitrile rubber gloves.

Skin and body protection	:	Protective clothing (e.g. Safety shoes acc. to EN ISO 20345, long-sleeved working clothing, long trousers). Rubber aprons and protective boots are additionally recommended for mixing and stirring work.
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. organic vapor filter (Type A) A1: < 1000 ppm; A2: < 5000 ppm; A3: < 10000 ppm Ensure adequate ventilation. This can be achieved by local exhaust extraction or by general ventilation. (EN 689 - Methods for determining inhalation exposure). This applies in particular to the mixing / stirring area. In case this is not sufficent to keep the concentrations under the occupational exposure limits then respiration protection measures must be used.

Environmental exposure controls

General advice	:	No special environmental precautions required.

Section 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state	:	liquid
Form	:	paste
Colour	:	various
Odour	:	slight
Melting point/ range / Freezing point	:	No data available
Boiling point/boiling range	:	No data available
Flammability (solid, gas)	:	No data available

Upper/lower flammability or explosive limits

Upper explosion limit / Upper flammability limit	:	No data available
Lower explosion limit / Lower flammability limit	:	No data available
Flash point	:	ca. 101 °C Method: closed cup
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
pH	:	Not applicable substance/mixture is non-soluble (in water)

Viscosity

Viscosity, dynamic	:	Not applicable
Viscosity, kinematic	:	Not applicable

Solubility(ies)

Water solubility	:	insoluble
Partition coefficient: n-octanol/water	:	No data available
Vapour pressure	:	0.01 hPa
Density	:	ca. 1.51 g/cm3 (20 °C)
Relative vapour density	:	No data available
Particle characteristics	:	No data available

9.2 Other information

No data available

Section 10: Stability and reactivity

10.1 Reactivity

No dangerous reaction known under conditions of normal use.

10.2 Chemical stability

The product is chemically stable.

10.3 Possibility of hazardous reactions

Hazardous reactions : No hazards to be specially mentioned.

10.4 Conditions to avoid

Conditions to avoid : No data available

10.5 Incompatible materials

Materials to avoid : No data available

10.6 Hazardous decomposition products

: methanol

:

No hazardous decomposition products are known.

Section 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

Not classified due to lack of data.

Components:

Pentamethylpiperidinol-substituted polyester:

Acute oral toxicity : LD50 Oral (Rat): 1,900 mg/kg

Acute toxicity estimate: 1,900 mg/kg
Method: Calculation method

trimethoxyvinylsilane:

Acute oral toxicity : LD50 Oral (Rat): ca. 7,120 mg/kg

Acute inhalation toxicity : LC50: ca. 16.8 mg/l
Exposure time: 4 h
Test atmosphere: vapour

Acute toxicity estimate: 16.8 mg/l
Test atmosphere: vapour
Method: Calculation method

Acute dermal toxicity : LD50: 3,540 mg/kg

2-octyl-2H-isothiazole-3-one (OIT):

Acute oral toxicity : Acute toxicity estimate: 125 mg/kg
Method: Acute toxicity estimate according to Regulation (EC) No. 1272/2008

Acute inhalation toxicity : Acute toxicity estimate: 0.27 mg/l
Test atmosphere: dust/mist
Method: Acute toxicity estimate according to Regulation (EC) No. 1272/2008

Acute dermal toxicity : Acute toxicity estimate: 311 mg/kg
Method: Acute toxicity estimate according to Regulation (EC) No. 1272/2008

Skin corrosion/irritation

Not classified due to lack of data.

Components:

distillates (petroleum), hydrotreated light paraffinic:

Assessment : Repeated exposure may cause skin dryness or cracking.

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.

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 hazard
Not classified due to lack of data.

11.2 Information on other hazards

Endocrine disrupting properties
Not classified due to lack of data.

Product:

Assessment	:	The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Section 12: Ecological information

12.1 Toxicity

Components:

Pentamethylpiperidinol-substituted polyester:

M-Factor (Acute aquatic toxicity)	:	1
M-Factor (Chronic aquatic toxicity)	:	1

2-octyl-2H-isothiazole-3-one (OIT):

M-Factor (Acute aquatic toxicity)	:	100
M-Factor (Chronic aquatic toxicity)	:	100

12.2 Persistence and degradability

No data available

12.3 Bioaccumulative potential

No data available

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

Product:

Assessment	:	This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher..

12.6 Endocrine disrupting properties

Product:

Assessment	:	The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

12.7 Other adverse effects

Product:

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

Section 13: Disposal considerations

13.1 Waste treatment methods

Product	:	The generation of waste should be avoided or minimized wherever possible. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe way. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. 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.
Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers.

Waste code Switzerland VeVA/LVA : 08 04 10 waste adhesives and sealants other than those mentioned in 08 04 09

Section 14: Transport information

14.1 UN number or ID number

ADR : Not regulated as a dangerous good

IMDG : Not regulated as a dangerous good

IATA : Not regulated as a dangerous good

14.2 UN proper shipping name

ADR : Not regulated as a dangerous good

IMDG : Not regulated as a dangerous good

IATA : Not regulated as a dangerous good

14.3 Transport hazard class(es)

ADR : Not regulated as a dangerous good

IMDG : Not regulated as a dangerous good

IATA : Not regulated as a dangerous good

14.4 Packing group

ADR : Not regulated as a dangerous good

IMDG : Not regulated as a dangerous good

IATA (Cargo) : Not regulated as a dangerous good

IATA (Passenger) : Not regulated as a dangerous good

14.5 Environmental hazards

Not regulated as a dangerous good

14.6 Special precautions for user

Not applicable

14.7 Maritime transport in bulk according to IMO instruments

Not applicable for product as supplied.

Section 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
International Chemical Weapons Convention (CWC) : Not applicable
Schedules of Toxic Chemicals and Precursors

REACH Information: All substances contained in our Products are

- registered by our upstream suppliers, and/or
- registered by us, and/or
- excluded from the regulation, and/or
- exempted from the registration.

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII)	:	Conditions of restriction for the following entries must be considered:: Number on list 40 This substance/mixture shall not be used in aerosol dispensers intended for supply to the general public for entertainment and decorative purposes. Number on list 40: 1-methoxy-2-propanol Number on list 75
REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59).	:	None of the components are listed (=> 0.1 %).
REACH - List of substances subject to authorisation (Annex XIV)	:	Not applicable
Regulation (EU) No 2024/590 on substances that deplete the ozone layer	:	Not applicable
Regulation (EU) 2019/1021 on persistent organic pollutants (recast)	:	Not applicable
PIC Ordinance, ChemPICO (814.82)	:	Not applicable
Ordinance on Protection against Major Accidents Threshold quantity according to Major Accidents Ordinance (MAO 814.012)	:	Not applicable
Chemical Risk Reduction Ordinance (ORRChem, SR 814.81)	:	Not applicable

Waters Protection Ordinance (WPO 814.201)

Water pollution class	:	slightly hazardous to water Classification according to AwSV, Annex 1 (5.2)
Volatile organic compounds	:	Ordinance on the Incentive Tax on Volatile Organic Compounds (OVOC) Volatile organic compounds (VOC) content: 0.04% w/w no VOC duties Directive 2010/75/EU of 24 November 2010 on industrial and livestock rearing emissions (integrated pollution prevention and control)

Volatile organic compounds (VOC) content: 0.04% w/w

Other regulations:

Article 13 Maternity ordinance and Safety Ordinance (SR 822.111.52): Expectant and nursing mothers are not permitted to come into contact with this product during the course of their work. However, if a risk assessment establishes that there is no specific risk to the health of mothers or their children or that any such risk can be excluded by taking suitable protective measures, mothers may work with this product (substance/preparation) (Art. 63 Ordinance 1 to the Employment Act; SR 822.111).

Take note of Directive 92/85/EEC regarding maternity protection or stricter national regulations, where applicable.

Young people undergoing basic vocational training may only work with this product if the relevant training ordinance makes provision for them to do so with a view to enabling them to achieve their training objectives and if the preconditions for the training plan have been met and the applicable age restrictions have been complied with. Young people who are not completing any basic vocational training are not permitted to work with this product. Employees of either sex who are under 18 years old are classed as young people.

15.2 Chemical safety assessment

No Chemical Safety Assessment has been carried out for this mixture by the supplier.

Tolerable Exposure Limits (TEL)

Not applicable

Environmental Exposure Limits (EEL)

Not applicable

HSW Controls

Certified handler certificate not required.
Tracking hazardous substance not required.
Refer to the Health and Safety at Work (Hazardous Substances) Regulations 2017, for further information.

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

NZ NZIoC	:	On the inventory, or in compliance with the inventory

Section 16: Other information

Full text of H-Statements

H226	:	Flammable liquid and vapour.
H301	:	Toxic if swallowed.
H302	:	Harmful if swallowed.
H304	:	May be fatal if swallowed and enters airways.
H311	:	Toxic in contact with skin.
H314	:	Causes severe skin burns and eye damage.
H317	:	May cause an allergic skin reaction.
H318	:	Causes serious eye damage.
H319	:	Causes serious eye irritation.

H330	:	Fatal if inhaled.
H332	:	Harmful if inhaled.
H400	:	Very toxic to aquatic life.
H410	:	Very toxic to aquatic life with long lasting effects.
H413	:	May cause long lasting harmful effects to aquatic life.

Full text of other abbreviations

Acute Tox.	:	Acute toxicity
Aquatic Acute	:	Short-term (acute) aquatic hazard
Aquatic Chronic	:	Long-term (chronic) aquatic hazard
Asp. Tox.	:	Aspiration hazard
Eye Dam.	:	Serious eye damage
Eye Irrit.	:	Eye irritation
Flam. Liq.	:	Flammable liquids
Skin Corr.	:	Skin corrosion
Skin Sens.	:	Skin sensitisation
2006/15/EC	:	Europe. Indicative occupational exposure limit values
CH BAT	:	Switzerland. List of BAT-values
CH SUVA	:	Switzerland. Limit values at the work place
2006/15/EC / TWA	:	Limit Value - eight hours
CH SUVA / TWA	:	Time Weighted Average
CH SUVA / STEL	:	Short Term Exposure Limit
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

Further information

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 !

CH / EN