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SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

Trade name : Sikaflex[®]-228T

1.2 Relevant identified uses of the substance or mixture and uses advised against

Product use : Adhesive

1.3 Details of the supplier of the safety data sheet

Company name of supplier	:	Sika Limited
		Watchmead Welwyn Garden City
		Hertfordshire. AL7 1BQ
Telephone	:	+44 (0)1707 394444
Telefax	:	+44 (0)1707 329129
E-mail address of person responsible for the SDS	:	EHS@uk.sika.com

1.4 Emergency telephone number

National Chemical Emergency Centre (NCEC) 24 Hour Emergency Telephone Number +44 870 190 6777

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

	•
Respiratory sensitisation, Category 1	H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Specific target organ toxicity - repeated exposure, Category 2, Central nervous	H373: May cause damage to organs through pro- longed or repeated exposure if inhaled.
system	longed of repeated exposure if innaled.
Long-term (chronic) aquatic hazard, Cat-	H412: Harmful to aquatic life with long lasting ef- fects.
egory 3	iecis.
2.2 Label elements	
Labelling (REGULATION (EC) No 1272/20	008)

Hazard pictograms

Signal word	:	Danger
Hazard statements	:	H334

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



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	H373	May cause damage to organs (C ous system) through prolonged c	
Precautionary statements :	H412	exposure if inhaled. Harmful to aquatic life with long l fects.	asting ef-
	P101	If medical advice is needed, have container or label at hand.	e product
	P102	Keep out of reach of children.	
	Prevention:		
	P260	Do not breathe mist or vapours.	
	Response:		
	P304 + P340	IF INHALED: Remove person to keep comfortable for breathing.	fresh air and
	P342 + P311	If experiencing respiratory sympt POISON CENTER/ doctor.	oms: Call a
	Disposal:		
	P501	Dispose of contents/container in with local regulation.	accordance

Hazardous components which must be listed on the label:

Hydrocarbons, C9-C12, n-alkanes, isoalkanes, cyclics, aromatics (2-25%) 4,4'-methylenediphenyl diisocyanate aromatic polyisocyanate

Additional Labelling

EUH204Contains isocyanates. May produce an allergic reaction.EUH211Warning! Hazardous respirable droplets may be formed when sprayed. Do not
breathe spray or mist.

Persons already sensitised to diisocyanates may develop allergic reactions when using this product.

Persons suffering from asthma, eczema or skin problems should avoid contact, including dermal contact, with this product.

This product should not be used under conditions of poor ventilation unless a protective mask with an appropriate gas filter (i.e. type A1 according to standard EN 14387) is used.

Persons already sensitised to diisocyanates may develop allergic reactions when using this product.

Persons suffering from asthma, eczema or skin problems should avoid contact, including dermal contact, with this product.

This product should not be used under conditions of poor ventilation unless a protective mask with an appropriate gas filter (i.e. type A1 according to standard EN 14387) is used.

"As from 24 August 2023 adequate training is required before industrial or professional use."



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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.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Components

Chemical name	CAS-No.	Classification	Concentration
	EC-No. Registration number		(% w/w)
Hydrocarbons, C9-C12, n- alkanes, isoalkanes, cyclics, aro- matics (2-25%)	Not Assigned 919-446-0 265-185-4 01-2119458049-33- XXXX [corresponding group CAS 64742-82- 1]	Flam. Liq. 3; H226 STOT SE 3; H336 (Central nervous system) STOT RE 1; H372 (Central nervous system) Asp. Tox. 1; H304 Aquatic Chronic 2; H411 EUH066	>= 2,5 - < 5
reaction mass of ethylbenzene and xylene	Not Assigned 905-588-0 01-2119488216-32- XXXX	Flam. Liq. 3; H226 Acute Tox. 4; H332 Acute Tox. 4; H312 Skin Irrit. 2; H315 Eye Irrit. 2; H319 STOT SE 3; H335 (Respiratory system) STOT RE 2; H373 Asp. Tox. 1; H304 Aquatic Chronic 3; H412	>= 1 - < 2,5

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Urea,N,N"-(methylenedi-4,1- phenylene)bis[N'-butyl-	77703-56-1 416-600-4 01-0000016345-72- XXXX	Aquatic Chronic 4; H413	>= 1 - < 2,5
4,4'-methylenediphenyl diisocya- nate	101-68-8 202-966-0 01-2119457014-47- XXXX	Acute Tox. 4; H332 Skin Irrit. 2; H315 Eye Irrit. 2; H319 Resp. Sens. 1; H334 Skin Sens. 1; H317 Carc. 2; H351 STOT SE 3; H335 (Respiratory system) STOT RE 2; H373 \longrightarrow STOT RE 2; H373 \longrightarrow STOT RE 2; H373 \longrightarrow STOT SE 3; H335 >= 5 % Stin Irrit. 2; H315 >= 5 % Skin Irrit. 2; H315 >= 5 % Resp. Sens. 1; H334 >= 0,1 % Acute toxicity estimate Acute inhalation tox- icity (dust/mist): 1,5	>= 0,1 - < 0,5
aromatic polyisocyanate	53317-61-6 Not Assigned	mg/l Eye Irrit. 2; H319 Skin Sens. 1; H317	>= 0,1 - < 0,5
Substances with a workplace expo	osure limit :		
Titanium dioxide (> 10 μm)	13463-67-7 236-675-5 01-2119489379-17- XXXX		>= 2,5 - < 5

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice

Move out of dangerous area. : Consult a physician. Show this safety data sheet to the doctor in attendance.





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If inhaled	:	Move to fresh air. Consult a physician after significant exp	ocure
		Consult a physician after significant exp	Josule.
In case of skin contact	:	Take off contaminated clothing and sho 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 specia	alist.
If swallowed	:	Do not induce vomiting without medical Rinse mouth with water. Do not give milk or alcoholic beverages Never give anything by mouth to an unc	
4.2 Most important symptoms a	nd	effects, both acute and delayed	
Symptoms		Asthmatic appearance Allergic reactions See Section 11 for more detailed inform and symptoms.	nation on health effects
Risks	:	sensitising effects	
		May cause allergy or asthma symptoms ties if inhaled. May cause damage to organs through p exposure if inhaled.	-
I.3 Indication of any immediate Treatment	me :	dical attention and special treatment n Treat symptomatically.	eeded
SECTION 5: Firefighting mea	sui	es	
5.1 Extinguishing media			
Suitable extinguishing media	:	In case of fire, use water/water spray/wa ide/sand/foam/alcohol resistant foam/ch extinction.	
5.2 Special hazards arising from	th	e substance or mixture	
		No hazardous combustion products are	known
5.3 Advice for firefighters			
-	:	In the event of fire, wear self-contained	breathing apparatus.



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for firefighters		
Further information :	Standard procedure for chemical fires.	
SECTION 6: Accidental release	measures	
6.1 Personal precautions, protective	e equipment and emergency procedures	
Personal precautions :	Use personal protective equipment. Deny access to unprotected persons.	
6.2 Environmental precautions		
Environmental precautions :	Do not flush into surface water or sanitary sewer If the product contaminates rivers and lakes or du respective authorities.	2
6.3 Methods and material for contai	nment and cleaning up	
Methods for cleaning up :	Soak up with inert absorbent material (e.g. sand, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal.	silica gel,

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	:	 Avoid exceeding the given occupational exposure limits (see section 8). For personal protection see section 8. Persons with a history of skin sensitisation 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 application area. Follow standard hygiene measures when handling chemical products
Advice on protection against fire and explosion	:	Normal measures for preventive fire protection.
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.



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7.2 Conditions for safe storage,	inc	uding any incompatibilities	
Requirements for storage areas and containers	:	Keep container tightly closed in a dry and place. Store in accordance with local regul	
Further information on stor- age stability	:	No decomposition if stored and applied as	directed.
7.3 Specific end use(s)			
Specific use(s)	:	Cleaning with aprotic polar solvents must l Consult most current local Product Data S use.	

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parame- ters *	Basis *			
Titanium dioxide (> 10 μm)	13463-67-7	TWA (inhalable dust)	10 mg/m3	GB EH40			
		TWÁ (Respirable dust)	4 mg/m3	GB EH40			
reaction mass of ethylbenzene and xy- lene	Not Assigned	TWÁ	50 ppm 221 mg/m3	2000/39/EC			
		Further information: Identifies the possibility of significant uptake through the skin, Indicative					
		STEL	100 ppm 442 mg/m3	2000/39/EC			
		TWA	50 ppm 220 mg/m3	GB EH40			
	signed substa	ation: Can be absor nces are those for w otion will lead to syst	which there are co				
		STEL	100 ppm 441 mg/m3	GB EH40			
4,4'-methylenediphenyl diisocyanate	101-68-8	TWA	0,02 mg/m3 (NCO)	GB EH40			
	Further information: Capable of causing occupational asthma.						
		STEL	0,07 mg/m3 (NCO)	GB EH40			

*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

Substance name	CAS-No.	Control parame-	Sampling time	Basis
		ters		
reaction mass of ethylbenzene and xylene	Not Assigned	methyl hippuric acid: 650 Millimo- les per mole cre- atinine (Urine)	After shift	GB EH40 BAT



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4,4'-methylenediphenyl diisocyanate	101-68-8	isocyanate- derived diamine (Isocyanates): 1 µmol/mol creati- nine (Urine)	At the end of the period of expo- sure	GB EH40 BAT

8.2 Exposure controls

Engineering measures

Maintain air concentrations below occupational exposure standards. Ensure adequate ventilation, especially in confined areas. Personal protective equipment Eye/face protection Safety glasses with side-shields conforming to EN166 Eye wash bottle with pure water 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. Suitable for short time use or protection against splashes: Butyl rubber/nitrile rubber gloves (> 0,1 mm) Contaminated gloves should be removed. Suitable for permanent exposure: Viton gloves (0.4 mm), breakthrough time >30 min. 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 additionaly 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. Use a properly fitted NIOSH approved air-purifying or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. 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 : Do not flush into surface water or sanitary sewer system. If the product contaminates rivers and lakes or drains inform respective authorities.



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SECTION 9: Physical and chemical properties

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9.1 Information on basic physic	cal an	
Physical state	:	liquid
Appearance Colour	÷	paste various
Odour	:	odourless
Ododi	•	
Melting point/range / Freezir point	ng :	No data available
Boiling point/boiling range	:	No data available
Flammability (solid, gas)	:	No data available
Upper/lower flammability of	-	
Upper explosion limit / Upper flammability limit	p- :	No data available
Lower explosion limit / Lower flammability limit	:	No data available
Flash point	:	ca. 62 °C Method: closed cup
Auto-ignition temperature	:	No data available
Decomposition temperature	:	No data available
рН	:	Not applicable substance/mixture is non-soluble (in water)
Viscosity		
Viscosity, kinematic	:	> 20,5 mm2/s (40 °C)
Solubility(ies)		
Water solubility	:	insoluble
Partition coefficient: n- octanol/water	:	No data available
Vapour pressure	:	0,01 hPa
Density	:	ca. 1,34 g/cm3 (20 °C)
Relative vapour density	:	No data available
Particle characteristics	:	No data available



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9.2 Other information		
No data available		
SECTION 10: Stability and	reactivity	
10.1 Reactivity		
No dangerous reaction know	wn under conditions of normal use.	
10.2 Chemical stability		
The product is chemically	table.	
10.3 Possibility of hazardous	reactions	
Hazardous reactions	: No hazards to be specially mentioned.	
10.4 Conditions to avoid		
Conditions to avoid	: Avoid moisture.	
10.5 Incompatible materials		

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No decomposition if stored and applied as directed.

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:

reaction mass of ethylbenzene and xylene:

Acute oral toxicity : LD50 Oral (Rat): 3.523 mg/kg

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

Acute oral toxicity	:	LD50 Oral (Rat): > 2.000 mg/kg Method: OECD Test Guideline 401
Acute dermal toxicity	:	LD50 Dermal (Rabbit): > 2.000 mg/kg Method: OECD Test Guideline 402

4,4'-methylenediphenyl diisocyanate:

Acute oral toxicity	:	LD50 Oral (Rat): > 5.000 mg/kg
		Method: OECD Test Guideline 401



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Acute inhalation toxicity	: LC50: 1,5 mg/l Exposure time: 4 h Test atmosphere: dust/mist Method: Expert judgement	
	Acute toxicity estimate: 1,5 mg/l Test atmosphere: dust/mist Method: Calculation method	
aromatic polyisocyanate:		
Acute oral toxicity	: LD50 Oral (Rat): > 5.000 mg/kg	
Skin corrosion/irritation		
Not classified due to lack of d	ata.	
<u>Components:</u>	konon innellenne evelien eremetien (2	259/)-
Assessment Result	 kanes, isoalkanes, cyclics, aromatics (2- Repeated exposure may cause skin dr Repeated exposure may cause skin dr 	ryness or cracking.
Serious eye damage/eye irr Not classified due to lack of d		
Respiratory or skin sensitis	ation	
Skin sensitisation Not classified due to lack of d	ata.	
Respiratory sensitisation May cause allergy or asthma	symptoms or breathing difficulties if inhaled	l.
Germ cell mutagenicity Not classified due to lack of d	ata.	
Carcinogenicity Not classified due to lack of d	ata.	
Reproductive toxicity Not classified due to lack of d	ata.	
STOT - single exposure Not classified due to lack of d	ata.	
STOT - repeated exposure May cause damage to organs inhaled.	(Central nervous system) through prolonge	ed or repeated exposure if
Aspiration toxicity	ata.	



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11.2 Information on other hazards		
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.

SECTION 12: Ecological information

12.1 Toxicity

Components:

reaction mass of ethylbenzene and xylene:

Toxicity to fish (Chronic tox- icity)	:	NOEC: > 1,3 mg/l Exposure time: 56 d Species: Oncorhynchus mykiss (rainbow trout)
Toxicity to daphnia and other aquatic invertebrates (Chron-ic toxicity)	:	NOEC: 1,17 mg/l Exposure time: 7 d Species: Daphnia (water flea)

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 aquatic invertebrates	:	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

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:



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Assessment	 This substance/mixture contains no con to be either persistent, bioaccumulative very persistent and very bioaccumulativ 0.1% or higher 	and toxic (PBT), or
12.6 Endocrine disrupting prope	erties	
Product:		
Assessment	 The substance/mixture does not contain ered to have endocrine disrupting proper REACH Article 57(f) or Commission Del (EU) 2017/2100 or Commission Regular levels of 0.1% or higher. 	erties according to legated regulation
12.7 Other adverse effects		
Product:		
Additional ecological infor- mation	: An environmental hazard cannot be exc unprofessional handling or disposal. Harmful to aquatic life with long lasting of	

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.
European Waste Catalogue	:	08 04 09* waste adhesives and sealants containing organic solvents or other dangerous substances
Contaminated packaging	:	15 01 10* packaging containing residues of or contaminated by dangerous substances



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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
	ΙΑΤΑ	:	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
	ΙΑΤΑ	:	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
	ΙΑΤΑ	:	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 Relevant EU provisions transposed through retained EU law

UK REACH List of restrictions (Annex 17)	 Conditions of restriction for the fol- lowing entries should be considered: 4,4'-methylenediphenyl diisocyanate (Number on list 74, 56) m-tolylidene diisocyanate (Number on list 74)
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			1,2-Benzenedicarboxylic acid, di-C9- 11-branched alkyl esters, C10-rich (Number on list 52)
UK REACH Candidate list of subs concern (SVHC) for Authorisation		:	Not applicable
The Persistent Organic Pollutants Regulation (EU) 2019/1021 as an ain)		:	Not applicable
International Chemical Weapons Schedules of Toxic Chemicals an		:	Not applicable
Regulation (EC) No 1005/2009 or plete the ozone layer	n substances that de-	:	Not applicable
UK REACH List of substances su (Annex XIV)	bject to authorisation	:	Not applicable
GB Export and import of hazardou Informed Consent (PIC) Regulation		:	Not applicable
Control of Major Accident Hazard 2015 (COMAH)	s Regulations	Not	applicable
Volatile organic compounds :	(VOCV)		or volatile organic compounds Is (VOC) content: 5,5% w/w
	emissions (integrated p	pollu	4 November 2010 on industrial ution prevention and control) Is (VOC) content: 5,5% w/w

If other regulatory information applies that is not already provided elsewhere in the Safety Data Sheet, then it is described in this subsection.

Other regulations:

Take note of The Management of Health and Safety at Work Regulations 1999 (requirements relating to new and expectant mothers at work contained in Regulation 16 to 18) and of the Pregnant Workers Directive 92/85/EEC.

Take note of The Management of Health and Safety at Work Regulations 1999 (requirements relating to protection of young people at work contained in Regulation 19) and of Directive 94/33/EC on the protection of young people at work.





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15.2 Chemical safety assessment

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

SECTION 16: Other information

Full text of H-Statements	
H226	: Flammable liquid and vapour.
H304	: May be fatal if swallowed and enters airways.
H312	: Harmful in contact with skin.
H315	: Causes skin irritation.
H317	: May cause an allergic skin reaction.
H319	: Causes serious eye irritation.
H332	: Harmful if inhaled.
H334	: May cause allergy or asthma symptoms or breathing difficul-
11554	ties if inhaled.
H335	: May cause respiratory irritation.
H336	: May cause drowsiness or dizziness.
H350 H351	: Suspected of causing cancer.
H372	: Causes damage to organs through prolonged or repeated exposure if inhaled.
H373	: May cause damage to organs through prolonged or repeated
11373	exposure if inhaled.
H411	: Toxic to aquatic life with long lasting effects.
H412	: Harmful to aquatic life with long lasting effects.
H412	: May cause long lasting harmful effects to aquatic life.
Full text of other abbreviatio	
Acute Tox.	: Acute toxicity
Aquatic Chronic	: Long-term (chronic) aquatic hazard
Asp. Tox.	: Aspiration hazard
Asp. Tox. Carc.	: Aspiration hazard
Asp. Tox. Carc. Eye Irrit.	 Aspiration hazard Carcinogenicity Eye irritation
Asp. Tox. Carc. Eye Irrit. Flam. Liq.	 Aspiration hazard Carcinogenicity Eye irritation Flammable liquids
Asp. Tox. Carc. Eye Irrit. Flam. Liq. Resp. Sens.	 Aspiration hazard Carcinogenicity Eye irritation Flammable liquids Respiratory sensitisation
Asp. Tox. Carc. Eye Irrit. Flam. Liq. Resp. Sens. Skin Irrit.	 Aspiration hazard Carcinogenicity Eye irritation Flammable liquids Respiratory sensitisation Skin irritation
Asp. Tox. Carc. Eye Irrit. Flam. Liq. Resp. Sens. Skin Irrit. Skin Sens.	 Aspiration hazard Carcinogenicity Eye irritation Flammable liquids Respiratory sensitisation Skin irritation Skin sensitisation
Asp. Tox. Carc. Eye Irrit. Flam. Liq. Resp. Sens. Skin Irrit.	 Aspiration hazard Carcinogenicity Eye irritation Flammable liquids Respiratory sensitisation Skin irritation Skin sensitisation Specific target organ toxicity - repeated exposure
Asp. Tox. Carc. Eye Irrit. Flam. Liq. Resp. Sens. Skin Irrit. Skin Sens. STOT RE STOT SE	 Aspiration hazard Carcinogenicity Eye irritation Flammable liquids Respiratory sensitisation Skin irritation Skin sensitisation Specific target organ toxicity - repeated exposure Specific target organ toxicity - single exposure
Asp. Tox. Carc. Eye Irrit. Flam. Liq. Resp. Sens. Skin Irrit. Skin Sens. STOT RE	 Aspiration hazard Carcinogenicity Eye irritation Flammable liquids Respiratory sensitisation Skin irritation Skin sensitisation Specific target organ toxicity - repeated exposure Specific target organ toxicity - single exposure Europe. Commission Directive 2000/39/EC establishing a first
Asp. Tox. Carc. Eye Irrit. Flam. Liq. Resp. Sens. Skin Irrit. Skin Sens. STOT RE STOT SE	 Aspiration hazard Carcinogenicity Eye irritation Flammable liquids Respiratory sensitisation Skin irritation Skin sensitisation Specific target organ toxicity - repeated exposure Specific target organ toxicity - single exposure Europe. Commission Directive 2000/39/EC establishing a first list of indicative occupational exposure limit values
Asp. Tox. Carc. Eye Irrit. Flam. Liq. Resp. Sens. Skin Irrit. Skin Sens. STOT RE STOT SE	 Aspiration hazard Carcinogenicity Eye irritation Flammable liquids Respiratory sensitisation Skin irritation Skin sensitisation Specific target organ toxicity - repeated exposure Specific target organ toxicity - single exposure Europe. Commission Directive 2000/39/EC establishing a first list of indicative occupational exposure limit values UK. EH40 WEL - Workplace Exposure Limits
Asp. Tox. Carc. Eye Irrit. Flam. Liq. Resp. Sens. Skin Irrit. Skin Sens. STOT RE STOT SE 2000/39/EC	 Aspiration hazard Carcinogenicity Eye irritation Flammable liquids Respiratory sensitisation Skin irritation Skin sensitisation Specific target organ toxicity - repeated exposure Specific target organ toxicity - single exposure Europe. Commission Directive 2000/39/EC establishing a first list of indicative occupational exposure limit values
Asp. Tox. Carc. Eye Irrit. Flam. Liq. Resp. Sens. Skin Irrit. Skin Sens. STOT RE STOT SE 2000/39/EC GB EH40	 Aspiration hazard Carcinogenicity Eye irritation Flammable liquids Respiratory sensitisation Skin irritation Skin sensitisation Specific target organ toxicity - repeated exposure Specific target organ toxicity - single exposure Europe. Commission Directive 2000/39/EC establishing a first list of indicative occupational exposure limit values UK. EH40 WEL - Workplace Exposure Limits
Asp. Tox. Carc. Eye Irrit. Flam. Liq. Resp. Sens. Skin Irrit. Skin Sens. STOT RE STOT SE 2000/39/EC GB EH40 GB EH40 BAT	 Aspiration hazard Carcinogenicity Eye irritation Flammable liquids Respiratory sensitisation Skin irritation Skin sensitisation Specific target organ toxicity - repeated exposure Specific target organ toxicity - single exposure Europe. Commission Directive 2000/39/EC establishing a first list of indicative occupational exposure limit values UK. EH40 WEL - Workplace Exposure Limits UK. Biological monitoring guidance values
Asp. Tox. Carc. Eye Irrit. Flam. Liq. Resp. Sens. Skin Irrit. Skin Sens. STOT RE STOT SE 2000/39/EC GB EH40 GB EH40 BAT 2000/39/EC / TWA	 Aspiration hazard Carcinogenicity Eye irritation Flammable liquids Respiratory sensitisation Skin irritation Skin sensitisation Specific target organ toxicity - repeated exposure Specific target organ toxicity - single exposure Europe. Commission Directive 2000/39/EC establishing a first list of indicative occupational exposure limit values UK. EH40 WEL - Workplace Exposure Limits UK. Biological monitoring guidance values Limit Value - eight hours
Asp. Tox. Carc. Eye Irrit. Flam. Liq. Resp. Sens. Skin Irrit. Skin Sens. STOT RE STOT SE 2000/39/EC GB EH40 GB EH40 BAT 2000/39/EC / TWA 2000/39/EC / STEL	 Aspiration hazard Carcinogenicity Eye irritation Flammable liquids Respiratory sensitisation Skin irritation Skin sensitisation Specific target organ toxicity - repeated exposure Specific target organ toxicity - single exposure Europe. Commission Directive 2000/39/EC establishing a first list of indicative occupational exposure limit values UK. EH40 WEL - Workplace Exposure Limits UK. Biological monitoring guidance values Limit Value - eight hours Short term exposure limit
Asp. Tox. Carc. Eye Irrit. Flam. Liq. Resp. Sens. Skin Irrit. Skin Sens. STOT RE STOT SE 2000/39/EC GB EH40 GB EH40 BAT 2000/39/EC / TWA 2000/39/EC / STEL GB EH40 / TWA	 Aspiration hazard Carcinogenicity Eye irritation Flammable liquids Respiratory sensitisation Skin irritation Skin sensitisation Specific target organ toxicity - repeated exposure Specific target organ toxicity - single exposure Europe. Commission Directive 2000/39/EC establishing a first list of indicative occupational exposure limit values UK. EH40 WEL - Workplace Exposure Limits UK. Biological monitoring guidance values Limit Value - eight hours Short term exposure limit Long-term exposure limit (8-hour TWA reference period)
Asp. Tox. Carc. Eye Irrit. Flam. Liq. Resp. Sens. Skin Irrit. Skin Sens. STOT RE STOT SE 2000/39/EC GB EH40 GB EH40 BAT 2000/39/EC / TWA 2000/39/EC / STEL GB EH40 / TWA GB EH40 / STEL	 Aspiration hazard Carcinogenicity Eye irritation Flammable liquids Respiratory sensitisation Skin irritation Skin sensitisation Specific target organ toxicity - repeated exposure Specific target organ toxicity - single exposure Europe. Commission Directive 2000/39/EC establishing a first list of indicative occupational exposure limit values UK. EH40 WEL - Workplace Exposure Limits UK. Biological monitoring guidance values Limit Value - eight hours Short term exposure limit (8-hour TWA reference period) Short-term exposure limit (15-minute reference period) European Agreement concerning the International Carriage of
Asp. Tox. Carc. Eye Irrit. Flam. Liq. Resp. Sens. Skin Irrit. Skin Sens. STOT RE STOT SE 2000/39/EC GB EH40 GB EH40 BAT 2000/39/EC / TWA 2000/39/EC / STEL GB EH40 / TWA GB EH40 / STEL	 Aspiration hazard Carcinogenicity Eye irritation Flammable liquids Respiratory sensitisation Skin irritation Skin sensitisation Specific target organ toxicity - repeated exposure Specific target organ toxicity - single exposure Europe. Commission Directive 2000/39/EC establishing a first list of indicative occupational exposure limit values UK. EH40 WEL - Workplace Exposure Limits UK. Biological monitoring guidance values Limit Value - eight hours Short term exposure limit (8-hour TWA reference period) Short-term exposure limit (15-minute reference period)



Sikaflex®-228T

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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 G	oods
LD50	: Median lethal dosis (the amount of a material	, given all at
	once, which causes the death of 50% (one ha	alf) of a group of
	test animals)	, , ,
LC50	: Median lethal concentration (concentrations of	of the chemical in
	air that kills 50% of the test animals during th	e observation
	period)	
MARPOL	: International Convention for the Prevention of	f Pollution from
	Ships, 1973 as modified by the Protocol of 19	978
OEL	: Occupational Exposure Limit	
PBT	: Persistent, bioaccumulative and toxic	
PNEC	: Predicted no effect concentration	
REACH	: Regulation (EC) No 1907/2006 of the Europe	an Parliament
	and of the Council of 18 December 2006 con	
	istration, Evaluation, Authorisation and Restri	
	cals (REACH), establishing a European Cher	
SVHC	: Substances of Very High Concern	
vPvB	: Very persistent and very bioaccumulative	

Further information

Classification of the	e mixture:	Classification procedure:
Resp. Sens. 1	H334	Calculation method
STOT RE 2	H373	Calculation method
Aquatic Chronic 3	H412	Calculation method

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 !

GB / EN