Sika® Primer-115

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

1.1 Product identifier

Trade name : Sika® Primer-115

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

Product use : Pretreatment agent, Product is not intended for consumer use

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)

Flammable liquids, Category 2	H225: Highly flammable liquid and vapour.
Eye irritation, Category 2	H319: Causes serious eye irritation.
Skin sensitisation, Category 1	H317: May cause an allergic skin reaction.
Specific target organ toxicity - single exposure, Category 3, Central nervous system	H336: May cause drowsiness or dizziness.
Specific target organ toxicity - single exposure, Category 3, Respiratory system	H335: May cause respiratory irritation.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :

Signal word : Danger

Hazard statements : H225 Highly flammable liquid and vapour.

		H317	May cause an allergic skin reaction.
		H319	Causes serious eye irritation.
		H335	May cause respiratory irritation.
		H336	May cause drowsiness or dizziness.
Supplemental Hazard Statements	:	EUH066	Repeated exposure may cause skin dryness or cracking.
Precautionary statements	:	**Prevention:**	
		P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
		P233	Keep container tightly closed.
		P261	Avoid breathing mist or vapours.
		P280	Wear protective gloves/ protective clothing/ eye protection/ face protection.
		Response:	
		P303 + P361 + P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
		P370 + P378	In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

Hazardous components which must be listed on the label:

ethyl acetate
Hexamethylene diisocyanate, oligomers
Isophorondiisocyanate homopolymer
hexamethylene-di-isocyanate
3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate

Additional Labelling

EUH204 Contains isocyanates. May produce an allergic reaction.

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. EC-No. Index-No. Registration number	Classification	Concentration (% w/w)
ethyl acetate	141-78-6 205-500-4 607-022-00-5 01-2119475103-46-XXXX	Flam. Liq. 2; H225 Eye Irrit. 2; H319 STOT SE 3; H336 (Central nervous system) EUH066	>= 40 - < 60
Hexamethylene diisocyanate, oligomers Contains: hexamethylene-di-isocyanate <= 0,49 %	28182-81-2 Not Assigned	Acute Tox. 4; H332 Skin Sens. 1; H317 STOT SE 3; H335 (Respiratory system) Acute toxicity esti-mate Acute inhalation tox-icity (dust/mist): 1,5 mg/l	>= 10 - < 20
tris(p-isocyanatophenyl) thiophos-phate Contains: chlorobenzene <= 3,57 %	4151-51-3 223-981-9 01-2119948848-16-XXXX	Acute Tox. 4; H302 Acute toxicity esti-mate Acute oral toxicity: 675 mg/kg	>= 5 - < 10
Isophorondiisocyanate homopol-ymer Contains: 3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate <= 0,49 %	53880-05-0 931-312-3 500-125-5 01-2119488734-24-XXXX	Skin Sens. 1B; H317 STOT SE 3; H335 (Respiratory system)	>= 5 - < 10
n-butyl acetate	123-86-4 204-658-1 607-025-00-1 01-2119485493-29-XXXX	Flam. Liq. 3; H226 STOT SE 3; H336 (Central nervous system) EUH066	>= 5 - < 10

reaction mass of ethylbenzene and xylene	Not Assigned 905-588-0 601-022-00-9 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 (hearing organs) Asp. Tox. 1; H304 Aquatic Chronic 3; H412	>= 1 - < 2,5
2-methoxy-1-methylethyl acetate Contains: 2-methoxypropyl acetate <= 1 %	108-65-6 203-603-9 607-195-00-7 01-2119475791-29-XXXX	Flam. Liq. 3; H226 STOT SE 3; H336	>= 1 - < 2,5
hexamethylene-di-isocyanate	822-06-0 212-485-8 615-011-00-1 01-2119457571-37-XXXX	Acute Tox. 4; H302 Acute Tox. 1; H330 Skin Irrit. 2; H315 Eye Irrit. 2; H319 Resp. Sens. 1; H334 Skin Sens. 1; H317 STOT SE 3; H335 (Respiratory system) --- specific concentration limit Resp. Sens. 1; H334 >= 0,5 % --- specific concentration limit Skin Sens. 1; H317 >= 0,5 % --- Acute toxicity esti-mate Acute oral toxicity: 746 mg/kg Acute inhalation tox-icity (vapour): 0,124 mg/l	< 0,1

3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate	4098-71-9 223-861-6 615-008-00-5 01-2119490408-31-XXXX	Acute Tox. 1; H330 Skin Corr. 1; H314 Eye Dam. 1; H318 Resp. Sens. 1; H334 Skin Sens. 1A; H317 Aquatic Chronic 2; H411 EUH071 --- specific concentration limit Resp. Sens. 1; H334 >= 0,5 % --- specific concentration limit Skin Sens. 1A; H317 >= 0,001 % --- Acute toxicity estimate Acute inhalation toxicity (dust/mist): 0,03 mg/l	>= 0,0025 - < 0,025

For explanation of abbreviations see section 16.

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.

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 : Immediately flush eye(s) with plenty of water.
Remove contact lenses.
Keep eye wide open while rinsing.
If eye irritation persists, consult a specialist.

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 : Cough
Respiratory disorder
Allergic reactions
Excessive lachrymation
Erythema
Loss of balance
Vertigo
See Section 11 for more detailed information on health effects and symptoms.

Risks : irritant effects
sensitising effects

May cause an allergic skin reaction.
Causes serious eye irritation.
May cause respiratory irritation.
May cause drowsiness or dizziness.
Repeated exposure may cause skin dryness or cracking.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment : Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media : Alcohol-resistant foam
Carbon dioxide (CO2)
Dry chemical

Unsuitable extinguishing media : Water

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 : Use water spray to cool unopened containers.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Use personal protective equipment.
Remove all sources of ignition.
Deny access to unprotected persons.
Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

6.2 Environmental precautions

Environmental precautions : Prevent product from entering drains.
If the product contaminates rivers and lakes or drains inform respective authorities.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

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 : Do not breathe vapours or spray mist.
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.
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.
Take precautionary measures against static discharge.
Open drum carefully as content may be under pressure.
Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapours).
Follow standard hygiene measures when handling chemical products

Advice on protection against fire and explosion	:	Use explosion-proof equipment. Keep away from heat/ sparks/ open flames/ hot surfaces. No smoking. Take precautionary measures against electrostatic discharges.
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.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers	:	Store in cool place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Store in accordance with local regulations.
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 *
ethyl acetate	141-78-6	STEL	400 ppm 1.468 mg/m3	2017/164/EU
	Further information: Indicative			
		TWA	200 ppm 734 mg/m3	2017/164/EU
		TWA	200 ppm 734 mg/m3	GB EH40
		STEL	400 ppm 1.468 mg/m3	GB EH40
Hexamethylene diisocyanate, oligomers	28182-81-2	TWA	0,01 mg/m3 (NCO)	98/24/EC I
	Further information: Skin, Dermal and respiratory sensitisation, Binding			
		STEL	0,02 mg/m3 (NCO)	98/24/EC I
tris(p-isocyanatophenyl) thiophosphate	4151-51-3	TWA	0,02 mg/m3 (NCO)	GB EH40
	Further information: Substances that can cause occupational asthma (also known as asthmagens and respiratory sensitisers) can induce a state of specific airway hyper-responsiveness via an immunological irritant or other mechanism. Once the airways have become hyper-responsive, further exposure to the substance, sometimes even in tiny quantities, may cause respiratory symp-			

	toms. These symptoms can range in severity from a runny nose to asthma. Not all workers who are exposed to a sensitiser will become hyper-responsive and it is impossible to identify in advance those who are likely to become hyper-responsive. Substances that can cause occupational asthma should be distinguished from substances which may trigger the symptoms of asthma in people with pre-existing airway hyper-responsiveness, but which do not include the disease themselves. The latter substances are not classified as asthmagens or respiratory sensitisers. Further information can be found in the HSE publication Asthmagen? Critical assessments of the evidence for agents implicated in occupational asthma., Wherever it is reasonably practicable, exposure to substances that can cause occupational asthma should be prevented. Where this is not possible, the primary aim is to apply adequate standards of control to prevent workers from becoming hyper-responsive. For substances that can cause occupational asthma, COSHH requires that exposure be reduced to as low as is reasonably practicable. Activities giving rise to short-term peak concentrations should receive particular attention when risk management is being considered. Health surveillance is appropriate for all employees exposed or liable to be exposed to a substance which may cause occupational asthma and there should be appropriate consultation with an occupational health professional over the degree of risk and level of surveillance., Capable of causing occupational asthma., The 'Sen' notation in the list of WELs has been assigned only to those substances which may cause occupational asthma in the categories shown in Table 1. It should be remembered that other substances not in these tables may cause occupational asthma. HSE's asthma web pages (www.hse.gov.uk/asthma) provide further information.			
		STEL	0,07 mg/m3 (NCO)	GB EH40
Isophorondiisocyanate homopolymer	53880-05-0	TWA	0,01 mg/m3 (NCO)	98/24/EC I
	Further information: Skin, Dermal and respiratory sensitisation, Binding			
		STEL	0,02 mg/m3 (NCO)	98/24/EC I
n-butyl acetate	123-86-4	TWA	150 ppm 724 mg/m3	GB EH40
		STEL	200 ppm 966 mg/m3	GB EH40
		STEL	150 ppm 723 mg/m3	2019/1831/EU
	Further information: Indicative			
		TWA	50 ppm 241 mg/m3	2019/1831/EU
reaction mass of ethylbenzene and xylene	Not Assigned	TWA	50 ppm 221 mg/m3	2000/39/EC
	Further information: Identifies the possibility of significant uptake through the skin, Indicative			
		STEL	100 ppm	2000/39/EC

			442 mg/m3	
		TWA	50 ppm 220 mg/m3	GB EH40
	Further information: Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity.			
		STEL	100 ppm 441 mg/m3	GB EH40
2-methoxy-1-methylethyl acetate	108-65-6	STEL	100 ppm 550 mg/m3	2000/39/EC
	Further information: Identifies the possibility of significant uptake through the skin, Indicative			
		TWA	50 ppm 275 mg/m3	2000/39/EC
		TWA	50 ppm 274 mg/m3	GB EH40
	Further information: Can be absorbed through the skin. The assigned substances are those for which there are concerns that dermal absorption will lead to systemic toxicity.			
		STEL	100 ppm 548 mg/m3	GB EH40
hexamethylene-di-isocyanate	822-06-0	TWA	0,02 mg/m3 (NCO)	GB EH40
	Further information: Substances that can cause occupational asthma (also known as asthmagens and respiratory sensitisers) can induce a state of specific airway hyper-responsiveness via an immunological irritant or other mechanism. Once the airways have become hyper-responsive, further exposure to the substance, sometimes even in tiny quantities, may cause respiratory symptoms. These symptoms can range in severity from a runny nose to asthma. Not all workers who are exposed to a sensitiser will become hyper-responsive and it is impossible to identify in advance those who are likely to become hyper-responsive. Substances that can cause occupational asthma should be distinguished from substances which may trigger the symptoms of asthma in people with pre-existing airway hyper-responsiveness, but which do not include the disease themselves. The latter substances are not classified as asthmagens or respiratory sensitisers. Further information can be found in the HSE publication Asthmagen? Critical assessments of the evidence for agents implicated in occupational asthma., Wherever it is reasonably practicable, exposure to substances that can cause occupational asthma should be prevented. Where this is not possible, the primary aim is to apply adequate standards of control to prevent workers from becoming hyper-responsive. For substances that can cause occupational asthma, COSHH requires that exposure be reduced to as low as is reasonably practicable. Activities giving rise to short-term peak concentrations should receive particular attention when risk management is being considered. Health surveillance is appropriate for all employees exposed or liable to be exposed to a substance which may cause occupational asthma and there should be appropriate consultation with an occupational health professional over the				

	degree of risk and level of surveillance., Capable of causing occupational asthma., The 'Sen' notation in the list of WELs has been assigned only to those substances which may cause occupational asthma in the categories shown in Table 1. It should be remembered that other substances not in these tables may cause occupational asthma. HSE's asthma web pages (www.hse.gov.uk/asthma) provide further information.			
		STEL	0,07 mg/m3 (NCO)	GB EH40
3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate	4098-71-9	TWA	0,02 mg/m3 (NCO)	GB EH40
	Further information: Substances that can cause occupational asthma (also known as asthmagens and respiratory sensitisers) can induce a state of specific airway hyper-responsiveness via an immunological irritant or other mechanism. Once the airways have become hyper-responsive, further exposure to the substance, sometimes even in tiny quantities, may cause respiratory symptoms. These symptoms can range in severity from a runny nose to asthma. Not all workers who are exposed to a sensitiser will become hyper-responsive and it is impossible to identify in advance those who are likely to become hyper-responsive. Substances that can cause occupational asthma should be distinguished from substances which may trigger the symptoms of asthma in people with pre-existing airway hyper-responsiveness, but which do not include the disease themselves. The latter substances are not classified as asthmagens or respiratory sensitisers. Further information can be found in the HSE publication Asthmagen? Critical assessments of the evidence for agents implicated in occupational asthma., Wherever it is reasonably practicable, exposure to substances that can cause occupational asthma should be prevented. Where this is not possible, the primary aim is to apply adequate standards of control to prevent workers from becoming hyper-responsive. For substances that can cause occupational asthma, COSHH requires that exposure be reduced to as low as is reasonably practicable. Activities giving rise to short-term peak concentrations should receive particular attention when risk management is being considered. Health surveillance is appropriate for all employees exposed or liable to be exposed to a substance which may cause occupational asthma and there should be appropriate consultation with an occupational health professional over the degree of risk and level of surveillance., Capable of causing occupational asthma., The 'Sen' notation in the list of WELs has been assigned only to those substances which may cause occupational asthma in the categories shown in Table 1. It should be remembered that other substances not in these tables may cause occupational asthma. HSE's asthma web pages (www.hse.gov.uk/asthma) provide further information.			
		STEL	0,07 mg/m3 (NCO)	GB EH40
		TWA	0,01 mg/m3 (NCO)	98/24/EC I
	Further information: Skin, Dermal and respiratory sensitisation,			

	Binding			
		STEL	0,02 mg/m3 (NCO)	98/24/EC I

*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 parameters	Sampling time	Basis
tris(p-isocyanatophenyl) thiophosphate	4151-51-3	isocyanate-derived diamine (Isocyanates): 1 µmol/mol creatinine (Urine)	At the end of the period of exposure	GB EH40 BAT
reaction mass of ethylbenzene and xylene	Not Assigned	methyl hippuric acid: 650 Millimoles per mole creatinine (Urine)	After shift	GB EH40 BAT
hexamethylene-di-isocyanate	822-06-0	isocyanate-derived diamine (Isocyanates): 1 µmol/mol creatinine (Urine)	At the end of the period of exposure	GB EH40 BAT
3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate	4098-71-9	isocyanate-derived diamine (Isocyanates): 1 µmol/mol creatinine (Urine)	At the end of the period of exposure	GB EH40 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 with side-shields conforming to EN166

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 additionally recommended for mixing and stirring work.
Choose body protection in relation to its type, to the concentration and amount of dangerous substances, and to the specific work-place.

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 : Prevent product from entering drains.
If the product contaminates rivers and lakes or drains inform respective authorities.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	:	liquid
Colour	:	yellow
Odour	:	ester-like
Melting point/ range / Freezing point	:	No data available
Boiling point/boiling range	:	> 35 °C
Flammability (solid, gas)	:	No data available

Upper/lower flammability or explosive limits

Upper explosion limit / Upper flammability limit	:	7,5 %(V)
Lower explosion limit / Lower flammability limit	:	1,2 %(V)
Flash point	:	-4 °C Method: closed cup
Auto-ignition temperature	:	333 °C

Decomposition temperature	:	No data available
pH	:	Not applicable substance/mixture is non-soluble (in water)

Viscosity

Viscosity, kinematic	:	No data available

Solubility(ies)

Water solubility	:	No data available
Solubility in other solvents	:	insoluble
Partition coefficient: n-octanol/water	:	No data available
Vapour pressure	:	99,9915 hPa
Density	:	ca. 1,0 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	:	Stable under recommended storage conditions. Vapours may form explosive mixture with air.

10.4 Conditions to avoid

Conditions to avoid	:	Heat, flames and sparks. Avoid moisture.

10.5 Incompatible materials

Materials to avoid	:	No data available

10.6 Hazardous decomposition products

: 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:

ethyl acetate:

Acute oral toxicity	:	LD50 Oral (Rat): > 5.000 mg/kg
Acute inhalation toxicity	:	LC50 (Rat): ca. 1.600 mg/l Exposure time: 4 h Test atmosphere: vapour
Acute dermal toxicity	:	LD50 Dermal (Rabbit): > 5.000 mg/kg

Hexamethylene diisocyanate, oligomers:

Acute oral toxicity	:	LD50 Oral (Rat): > 5.000 mg/kg
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

tris(p-isocyanatophenyl) thiophosphate:

Acute oral toxicity	:	LD50 Oral (Rat): > 675 mg/kg Remarks: see user defined free text Acute toxicity estimate: 675 mg/kg Method: Calculation method
Acute inhalation toxicity	:	LC50 (Rat): 5,721 mg/l Exposure time: 4 h Test atmosphere: dust/mist

n-butyl acetate:

Acute oral toxicity	:	LD50 Oral (Rat): > 5.000 mg/kg
Acute inhalation toxicity	:	LC50 (Rat): 23,4 mg/l Exposure time: 4 h Test atmosphere: vapour
Acute dermal toxicity	:	LD50 Dermal (Rabbit): > 5.000 mg/kg

reaction mass of ethylbenzene and xylene:

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

2-methoxy-1-methylethyl acetate:

Acute oral toxicity	:	LD50 Oral (Rat): > 5.000 mg/kg
Acute dermal toxicity	:	LD50 Dermal (Rabbit): > 5.000 mg/kg

hexamethylene-di-isocyanate:

Acute oral toxicity	:	LD50 Oral (Rat): 746 mg/kg Acute toxicity estimate: 746 mg/kg Method: Calculation method
Acute inhalation toxicity	:	LC50 (Rat): 0,124 mg/l Exposure time: 4 h Test atmosphere: vapour Acute toxicity estimate: 0,124 mg/l Test atmosphere: vapour Method: Calculation method
Acute dermal toxicity	:	LD50 Dermal (Rat): > 7.000 mg/kg

3-isocyanatomethyl-3,5,5-trimethylcyclohexyl isocyanate:

Acute oral toxicity	:	LD50 Oral (Rat): 4.814 mg/kg
Acute inhalation toxicity	:	Acute toxicity estimate: 0,03 mg/l Test atmosphere: dust/mist Method: Acute toxicity estimate according to Regulation (EC) No. 1272/2008 LC50 (Rat): 0,03 mg/l Exposure time: 4 h Test atmosphere: dust/mist
Acute dermal toxicity	:	LD50 Dermal (Rat): > 7.000 mg/kg

Skin corrosion/irritation
Repeated exposure may cause skin dryness or cracking.

Components:

n-butyl acetate:
Result : Repeated exposure may cause skin dryness or cracking.

Serious eye damage/eye irritation
Causes serious eye irritation.

Respiratory or skin sensitisation

Skin sensitisation
May cause an allergic skin reaction.

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
May cause respiratory irritation.
May cause drowsiness or dizziness.

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:

Hexamethylene diisocyanate, oligomers:

Toxicity to fish	:	LC50 (Danio rerio (zebra fish)): > 100 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

n-butyl acetate:

Toxicity to algae/aquatic plants	:	EC50 (Desmodesmus subspicatus (green algae)): 647,7 mg/l Exposure time: 72 h

reaction mass of ethylbenzene and xylene:

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

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.

European Waste Catalogue : 08 01 11* waste paint and varnish containing organic solvents or other dangerous substances

Contaminated packaging : 15 01 10* packaging containing residues of or contaminated by dangerous substances

SECTION 14: Transport information

14.1 UN number or ID number

ADR : UN 1866

IMDG : UN 1866

IATA : UN 1866

14.2 UN proper shipping name

ADR : RESIN SOLUTION

IMDG : RESIN SOLUTION

IATA : Resin solution

14.3 Transport hazard class(es)

		Class	Subsidiary risks
ADR	:	3	
IMDG	:	3	
IATA	:	3	

14.4 Packing group

ADR

Packing group	:	II
Classification Code	:	F1
Hazard Identification Number	:	33
Labels	:	3
Tunnel restriction code	:	(D/E)

IMDG

Packing group	:	II
Labels	:	3
EmS Code	:	F-E, S-E

IATA (Cargo)

Packing instruction (cargo aircraft)	:	364
Packing instruction (LQ)	:	Y341
Packing group	:	II
Labels	:	Flammable Liquids

IATA (Passenger)

Packing instruction (passenger aircraft)	:	353
Packing instruction (LQ)	:	Y341
Packing group	:	II
Labels	:	Flammable Liquids

14.5 Environmental hazards

ADR

Environmentally hazardous	:	no

IMDG

Marine pollutant	:	no

IATA (Passenger)

Environmentally hazardous	:	no

IATA (Cargo)

Environmentally hazardous	:	no

14.6 Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

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 following entries should be considered: Number on list 3 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.
UK REACH Candidate list of substances of very high concern (SVHC) for Authorisation	:	Not applicable
The Persistent Organic Pollutants Regulations (retained Regulation (EU) 2019/1021 as amended for Great Britain)	:	Not applicable
International Chemical Weapons Convention (CWC) Schedules of Toxic Chemicals and Precursors	:	Not applicable
Regulation (EU) No 2024/590 on substances that deplete the ozone layer	:	Not applicable
UK REACH List of substances subject to authorisation (Annex XIV)	:	Not applicable
GB Export and import of hazardous chemicals - Prior Informed Consent (PIC) Regulation	:	Not applicable

Control of Major Accident Hazards Regulations 2015 (COMAH)		P5c	FLAMMABLE LIQUIDS
Volatile organic compounds	:	Ordinance on the Incentive Tax on Volatile Organic Compounds (OVOC) Volatile organic compounds (VOC) content: 57,3% w/w Directive 2010/75/EU of 24 November 2010 on industrial and livestock rearing emissions (integrated pollution prevention and control) Volatile organic compounds (VOC) content: 57,3% 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.

Health, safety and environmental regulation/legislation specific for the substance or mixture:	:	Environmental Protection Act 1990 & Subsidiary Regulations Health and Safety at Work Act 1974 & Subsidiary Regulations Control of Substances Hazardous to Health Regulations (COSHH) May be subject to the Control of Major Accident Hazards Regulations (COMAH), and amendments.

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.

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

H225	:	Highly flammable liquid and vapour.
H226	:	Flammable liquid and vapour.
H302	:	Harmful if swallowed.
H304	:	May be fatal if swallowed and enters airways.
H312	:	Harmful in contact with skin.
H314	:	Causes severe skin burns and eye damage.
H315	:	Causes skin irritation.
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.
H334	:	May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335	:	May cause respiratory irritation.
H336	:	May cause drowsiness or dizziness.
H373	:	May cause damage to organs through prolonged or repeated exposure if inhaled.
H411	:	Toxic to aquatic life with long lasting effects.
H412	:	Harmful to aquatic life with long lasting effects.

Full text of other abbreviations

Acute Tox.	:	Acute toxicity
Aquatic Chronic	:	Long-term (chronic) aquatic hazard

Asp. Tox.	:	Aspiration hazard
Eye Dam.	:	Serious eye damage
Eye Irrit.	:	Eye irritation
Flam. Liq.	:	Flammable liquids
Resp. Sens.	:	Respiratory sensitisation
Skin Corr.	:	Skin corrosion
Skin Irrit.	:	Skin irritation
Skin Sens.	:	Skin sensitisation
STOT RE	:	Specific target organ toxicity - repeated exposure
STOT SE	:	Specific target organ toxicity - single exposure
2000/39/EC	:	Europe. Commission Directive 2000/39/EC establishing a first list of indicative occupational exposure limit values
2017/164/EU	:	Europe. Commission Directive 2017/164/EU establishing a fourth list of indicative occupational exposure limit values
2019/1831/EU	:	Europe. Commission Directive 2019/1831/EU establishing a fifth list of indicative occupational exposure limit values
98/24/EC I	:	Europe. Chemical Agents Directive - Annex I: Binding occupational exposure limit values
GB EH40	:	UK. EH40 WEL - Workplace Exposure Limits
GB EH40 BAT	:	UK. Biological monitoring guidance values
2000/39/EC / TWA	:	Limit Value - eight hours
2000/39/EC / STEL	:	Short term exposure limit
2017/164/EU / STEL	:	Short term exposure limit
2017/164/EU / TWA	:	Limit Value - eight hours
2019/1831/EU / TWA	:	Limit Value - eight hours
2019/1831/EU / STEL	:	Short term exposure limit
98/24/EC I / STEL	:	Limit values Short-term
98/24/EC I / TWA	:	Limit values 8 hours
GB EH40 / TWA	:	Long-term exposure limit (8-hour TWA reference period)
GB EH40 / STEL	:	Short-term exposure limit (15-minute reference period)
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 Reg-

istration, 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

Classification of the mixture:		**Classification procedure:**
Flam. Liq. 2	H225	Based on product data or assessment
Eye Irrit. 2	H319	Calculation method
Skin Sens. 1	H317	Calculation method
STOT SE 3	H336	Calculation method
STOT SE 3	H335	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