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

1.1 Product identifier

Trade name : Sikadur®-33 (B)

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

Product use : Adhesive, Product is not intended for consumer use

1.3 Details of the supplier of the safety data sheet

Company : Sika Limited
Watchmead
Welwyn Garden City
Hertfordshire AL7 1BQ
United Kingdom

Telephone : +44 (0)1707 394444

1.4 Emergency telephone number

Emergency telephone number : +44 (0)1707 363899 (available during office hours)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Type of product : Mixture

Classification (REGULATION (EC) No 1272/2008)

Skin corrosion, Sub-category 1B	H314: Causes severe skin burns and eye damage.
Serious eye damage, Category 1	H318: Causes serious eye damage.
Skin sensitisation, Category 1	H317: May cause an allergic skin reaction.
Short-term (acute) aquatic hazard, Category 1	H400: Very toxic to aquatic life.
Long-term (chronic) aquatic hazard, Category 1	H410: Very toxic to aquatic life with long lasting effects.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :

Signal word : Danger

Hazard statements :

H314	Causes severe skin burns and eye damage.
H317	May cause an allergic skin reaction.
H410	Very toxic to aquatic life with long lasting effects.

Precautionary statements :

Prevention:

P273	Avoid release to the environment.
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.
P304 + P340 + P310	IF INHALED: Remove person to fresh air and keep comfortable for breathing. Immediately call a POISON CENTER/doctor.
P305 + P351 + P338 + P310	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.
P391	Collect spillage.

Hazardous components which must be listed on the label:

- 220-666-8 3-aminomethyl-3,5,5-trimethylcyclohexylamine
- 292-588-2 Amines, polyethylenepoly-, triethylenetetramine fraction
- 295-532-5 Tall oil, reaction products with N-(2-aminoethyl)piperazine
- 202-013-9 2,4,6-tris(dimethylaminomethyl)phenol
- 500-382-3 polyaminoamide adduct

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.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Hazardous components

Chemical name CAS-No. EC-No. Registration number	Classification (REGULATION (EC) No 1272/2008)	Concentration [%]
benzyl alcohol	Acute Tox.4; H302	>= 5 - < 10

100-51-6 202-859-9 01-2119492630-38-XXXX	Acute Tox.4; H332 Eye Irrit.2; H319	
3-aminomethyl-3,5,5-trimethylcyclohexylamine 2855-13-2 220-666-8 01-2119514687-32-XXXX	Acute Tox.4; H302 Acute Tox.4; H312 Skin Corr.1B; H314 Skin Sens.1A; H317 Aquatic Chronic3; H412 Eye Dam.1; H318	>= 3 - < 5
(1-methylethyl)-1,1'-biphenyl 25640-78-2 247-156-8 01-2119982993-17-XXXX Contains: diisopropyl-1,1'-biphenyl	Eye Irrit.2; H319 Asp. Tox.1; H304 Aquatic Acute1; H400 Aquatic Chronic1; H410	>= 2,5 - < 5
Amines, polyethylenepoly-, triethylenetetramine fraction 90640-67-8 292-588-2 01-2119487919-13-XXXX Contains: 2-(2-aminoethylamino)ethanol <= 0,3 %	Acute Tox.4; H302 Acute Tox.4; H312 Skin Corr.1B; H314 Skin Sens.1; H317 Aquatic Chronic3; H412	>= 3 - < 5
Tall oil, reaction products with N-(2-aminoethyl)piperazine 92062-17-4 295-532-5 01-2119491298-25-XXXX (belongs to CAS 1228186-18-2)	Acute Tox.4; H302 Skin Corr.1B; H314 Skin Sens.1; H317 Aquatic Acute1; H400 Aquatic Chronic1; H410	>= 2,5 - < 3
2,4,6-tris(dimethylaminomethyl)phenol 90-72-2 202-013-9 01-2119560597-27-XXXX Contains: bis[(dimethylamino)methyl]phenol <= 15 %	Skin Sens.1B; H317 Skin Corr.1C; H314 Eye Dam.1; H318	>= 1 - < 2,5
polyaminoamide adduct 157707-73-8 500-382-3	Skin Irrit.2; H315 Eye Dam.1; H318 Skin Sens.1; H317 Aquatic Chronic2; H411	>= 1 - < 2,5

For the full text of the H-Statements mentioned in this Section, 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.
Immediate medical treatment is necessary as untreated wounds from corrosion of the skin heal slowly and with difficulty.

In case of eye contact : Small amounts splashed into eyes can cause irreversible tissue damage and blindness.
In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
Continue rinsing eyes during transport to hospital.
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 : Allergic reactions
Dermatitis
See Section 11 for more detailed information on health effects and symptoms.

Risks : Health injuries may be delayed.
corrosive effects
sensitising effects

May cause an allergic skin reaction.
Causes serious eye damage.
Causes severe burns.

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 : 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

Specific hazards during fire-fighting	:	Do not allow run-off from fire fighting to enter drains or water courses.
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	:	Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective 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 system. If the product contaminates rivers and lakes or drains inform respective authorities.

6.3 Methods and materials for containment and cleaning up

Methods for cleaning up	:	Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Keep in suitable, closed containers for disposal.

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). 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. Fol-

low 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.

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.
Other data	:	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

Contains no substances with occupational exposure limit values.

8.2 Exposure controls

Personal protective equipment

Eye protection	:	Safety glasses with side-shields conforming to EN166 Eye wash bottle with pure water Wear eye/face protection.
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 (0,4 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 : No special measures required.

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.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	:	paste
Colour	:	grey
Odour	:	amine-like
Odour Threshold	:	No data available
Flash point	:	> 101 °C
Autoignition temperature	:	No data available
Decomposition temperature	:	No data available
Lower explosion limit (Vol-%)	:	No data available
Upper explosion limit (Vol-%)	:	No data available
Flammability	:	No data available
Explosive properties	:	No data available
Oxidizing properties	:	No data available
pH	:	ca. 11 at 500,00 g/l
Melting point/range / Freezing point	:	No data available
Boiling point/boiling range	:	No data available
Vapour pressure	:	> 10 hPa
Density	:	ca.1,25 g/cm3

		at 20 °C
Water solubility	:	insoluble
Partition coefficient: n-octanol/water	:	No data available
Viscosity, dynamic	:	No data available
Viscosity, kinematic	:	> 20,5 mm2/s at 40 °C
Relative vapour density	:	No data available
Evaporation rate	:	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.

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

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Not classified based on available information.

Components:

benzyl alcohol:

Acute oral toxicity : LD50 Oral (Rat): 1.620 mg/kg

Acute inhalation toxicity : LC50 (Rat): > 4,178 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist

3-aminomethyl-3,5,5-trimethylcyclohexylamine:
Acute oral toxicity : LD50 Oral (Rat): 1.030 mg/kg

Acute inhalation toxicity : LC50 (Rat): > 5,01 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist

Acute dermal toxicity : LD50 Dermal (Rabbit): > 2.000 mg/kg

Amines, polyethylenepoly-, triethylenetetramine fraction:
Acute oral toxicity : LD50 Oral (Rat): 1.716 mg/kg

Acute dermal toxicity : LD50 Dermal (Rabbit): 1.465 mg/kg

2,4,6-tris(dimethylaminomethyl)phenol:
Acute oral toxicity : LD50 Oral (Rat): 2.169 mg/kg

Skin corrosion/irritation

Causes severe burns.

Serious eye damage/eye irritation

Causes serious eye damage.

Respiratory or skin sensitisation

Skin sensitisation: May cause an allergic skin reaction.
Respiratory sensitisation: Not classified based on available information.

Components:

3-aminomethyl-3,5,5-trimethylcyclohexylamine:
Assessment: The product is a skin sensitiser, sub-category 1A.
Result: The product is a skin sensitiser, sub-category 1A.

Germ cell mutagenicity

Not classified based on available information.

Carcinogenicity

Not classified based on available information.

Reproductive toxicity

Not classified based on available information.

STOT - single exposure

Not classified based on available information.

STOT - repeated exposure

Not classified based on available information.

Aspiration toxicity

Not classified based on available information.

SECTION 12: Ecological information

12.1 Toxicity

Components:

benzyl alcohol :

Toxicity to fish	:	LC50: > 100 mg/l, 96 h, Fish
Toxicity to daphnia and other aquatic invertebrates	:	EC50: > 100 mg/l, 48 h, Daphnia magna (Water flea)

3-aminomethyl-3,5,5-trimethylcyclohexylamine :

Toxicity to algae	:	ErC50: > 10 - 100 mg/l, 72 h, Desmodesmus subspicatus (green algae)

(1-methylethyl)-1,1'-biphenyl :

Toxicity to daphnia and other aquatic invertebrates	:	LC50: 0,167 mg/l, 48 h, Daphnia magna (Water flea)

Tall oil, reaction products with N-(2-aminoethyl)piperazine :

Toxicity to fish	:	LC50: > 0,1 - 1 mg/l, 96 h, Danio rerio (zebra fish)
Toxicity to algae	:	EC50: > 0,01 - 0,1 mg/l, 72 h, Pseudokirchneriella subcapitata (green algae)
M-Factor (Short-term (acute) aquatic hazard)	:	10

2,4,6-tris(dimethylaminomethyl)phenol :

Toxicity to algae	:	EC50: > 10 - 100 mg/l, 72 h, Scenedesmus capricornutum (fresh water algae)

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 Other adverse effects

Product:

Additional ecological information	:	An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Very toxic to aquatic life with long lasting effects.

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

SECTION 14: Transport information

ADR

14.1 UN number	:	1760
14.2 UN proper shipping name	:	CORROSIVE LIQUID, N.O.S. (3-aminomethyl-3,5,5-trimethylcyclohexylamine, (1-methylethyl)-1,1'-biphenyl)
14.3 Transport hazard class(es)	:	8
14.4 Packing group	:	III
Classification Code	:	C9
Labels	:	8
Tunnel restriction code	:	(E)
14.5 Environmental hazards	:	yes

IATA

14.1 UN number	:	1760
14.2 UN proper shipping name	:	Corrosive liquid, n.o.s. (3-aminomethyl-3,5,5-trimethylcyclohexylamine, (1-methylethyl)-1,1'-biphenyl)
14.3 Transport hazard class(es)	:	8
14.4 Packing group	:	III
Labels	:	8
14.5 Environmental hazards	:	yes

IMDG

14.1 UN number	:	1760
14.2 UN proper shipping name	:	CORROSIVE LIQUID, N.O.S. (3-aminomethyl-3,5,5-trimethylcyclohexylamine, (1-methylethyl)-1,1'-biphenyl)
14.3 Class	:	8
14.4 Packing group	:	III
Labels	:	8
EmS Number 1	:	F-A
EmS Number 2	:	S-B
14.5 Marine pollutant	:	yes

14.6 Special precautions for user
No data available

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code
Not applicable

SECTION 15: Regulatory information

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

Prohibition/Restriction

International Chemical Weapons Convention (CWC) Schedules of Toxic Chemicals and Precursors	:	Not applicable
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
REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, preparations and articles (Annex XVII)	:	Conditions of restriction for the following entries should be considered: (3)

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.

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving dangerous substances.

		Quantity 1	Quantity 2
E1	ENVIRONMENTAL HAZARDS	100 t	200 t

VOC-CH (VOCV) : 9,25 %

VOC-EU (solvent) : 9,25 %

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.

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

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.
H332	Harmful if inhaled.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
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 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
Skin Corr.	Skin corrosion
Skin Irrit.	Skin irritation
Skin Sens.	Skin sensitisation
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

Classification of the mixture:		**Classification procedure:**
Skin Corr. 1B	H314	Calculation method
Eye Dam. 1	H318	Calculation method
Skin Sens. 1	H317	Calculation method
Aquatic Acute 1	H400	Calculation method
Aquatic Chronic 1	H410	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 !