



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

1.1 Product identifier

Trade name : Sikalastic®-851 (A)

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

Product use : Polyurethane coating

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)

Acute toxicity, Category 4	H332: Harmful if inhaled.
Skin irritation, Category 2	H315: Causes skin irritation.
Eye irritation, Category 2	H319: Causes serious eye irritation.
Respiratory sensitisation, Category 1	H334: May cause allergy or asthma symptoms or breathing difficulties if inhaled.
Skin sensitisation, Category 1	H317: May cause an allergic skin reaction.
Carcinogenicity, Category 2	H351: Suspected of causing cancer.
Specific target organ toxicity - single exposure, Category 3, Respiratory system	H335: May cause respiratory irritation.
Specific target organ toxicity - repeated exposure, Category 2	H373: May cause damage to organs through prolonged or repeated exposure if inhaled.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms	:	 																
Signal word	:	Danger																
Hazard statements	:	<table border="0"> <tr> <td style="padding-right: 20px;">H315</td> <td>Causes skin irritation.</td> </tr> <tr> <td>H317</td> <td>May cause an allergic skin reaction.</td> </tr> <tr> <td>H319</td> <td>Causes serious eye irritation.</td> </tr> <tr> <td>H332</td> <td>Harmful if inhaled.</td> </tr> <tr> <td>H334</td> <td>May cause allergy or asthma symptoms or breathing difficulties if inhaled.</td> </tr> <tr> <td>H335</td> <td>May cause respiratory irritation.</td> </tr> <tr> <td>H351</td> <td>Suspected of causing cancer.</td> </tr> <tr> <td>H373</td> <td>May cause damage to organs through prolonged or repeated exposure if inhaled.</td> </tr> </table>	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 difficulties if inhaled.	H335	May cause respiratory irritation.	H351	Suspected of causing cancer.	H373	May cause damage to organs through prolonged or repeated exposure if inhaled.
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Hazardous components which must be listed on the label:

- 202-966-0 4,4'-methylenediphenyl diisocyanate

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.	Classification (REGULATION (EC) No 1272/2008)	Concentration [%]



Registration number		
4,4'-methylenediphenyl diisocyanate 101-68-8 202-966-0 01-2119457014-47-XXXX	Acute Tox.4; H332 Eye Irrit.2; H319 STOT SE3; H335 Skin Irrit.2; H315 Resp. Sens.1; H334 Skin Sens.1; H317 Carc.2; H351 STOT RE2; H373	>= 25 - < 40

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.
 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 : Asthmatic appearance
 Cough
 Respiratory disorder
 Allergic reactions
 Excessive lachrymation
 Erythema
 Headache
 Dermatitis
 See Section 11 for more detailed information on health effects and symptoms.
- Risks : irritant effects
 sensitising effects



Causes skin irritation.
May cause an allergic skin reaction.
Causes serious eye irritation.
Harmful if inhaled.
May cause allergy or asthma symptoms or breathing difficulties if inhaled.
May cause respiratory irritation.
Suspected of causing cancer.
May cause damage to organs through prolonged or repeated exposure if inhaled.

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

Hazardous combustion products : No hazardous combustion products are known

5.3 Advice for firefighters

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

Further information : Standard procedure for chemical fires.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : 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 formation of aerosol. 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. Provide sufficient air exchange and/or exhaust in work rooms. 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.

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. Containers which are opened must be carefully resealed and kept upright to prevent leakage. 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

Components with workplace control parameters



Components	CAS-No.	Value	Control parameters *	Basis *
4,4'-methylenediphenyl diisocyanate	101-68-8	TWA	0,02 mg/m3	GB EH40
		STEL	0,07 mg/m3	GB EH40

Biological occupational exposure limits

Substance name	CAS-No.	Control parameters	Sampling time	Basis
4,4'-methylenediphenyl diisocyanate	101-68-8	urinary diamine: 1µmol/mol creatinine (Urine)	Post task	GB EH40 BAT

8.2 Exposure controls

Personal protective equipment

- Eye 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 (0,4 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 additionally recommended for mixing and stirring work.
- 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 (Type A) and particulate filter
 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.
 A1: < 1000 ppm; A2: < 5000 ppm; A3: < 10000 ppm
 P1: Inert material; P2, P3: hazardous substances
 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 sufficient to keep the concentrations under the occupational exposure limits then respiration protection measures must be used.

Ensure adequate ventilation, especially in confined areas.

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	: liquid
Colour	: colourless
Odour	: slight
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	: Not applicable
Melting point/range / Freezing point	: No data available
Boiling point/boiling range	: No data available
Vapour pressure	: 0,01 hPa
Density	: ca.1,07 g/cm ³



	at 20 °C
Water solubility	: insoluble
Partition coefficient: n-octanol/water	: No data available
Viscosity, dynamic	: ca.1.200 mPa.s at 20 °C
Viscosity, kinematic	: > 20,5 mm ² /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

Harmful if inhaled.

Components:

|| 4,4'-methylenediphenyl diisocyanate:

Acute inhalation toxicity : Acute toxicity estimate: 1,5 mg/l



Test atmosphere: dust/mist
Method: Expert judgement

Skin corrosion/irritation

Causes skin irritation.

Serious eye damage/eye irritation

Causes serious eye irritation.

Respiratory or skin sensitisation

Skin sensitisation: May cause an allergic skin reaction.

Respiratory sensitisation: May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Germ cell mutagenicity

Not classified based on available information.

Carcinogenicity

Suspected of causing cancer.

Reproductive toxicity

Not classified based on available information.

STOT - single exposure

May cause respiratory irritation.

STOT - repeated exposure

May cause damage to organs through prolonged or repeated exposure if inhaled.

Aspiration toxicity

Not classified based on available information.

SECTION 12: Ecological information

12.1 Toxicity

No data available

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

SECTION 14: Transport information

14.1 UN number

Not regulated as a dangerous good

14.2 UN proper shipping name

Not regulated as a dangerous good

14.3 Transport hazard class(es)

Not regulated as a dangerous good

14.4 Packing group

Not regulated as a dangerous good

14.5 Environmental hazards

Not regulated as a dangerous good



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

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)

4,4'-methylenediphenyl diisocyanate
(56)

REACH Information: All substances contained in our Products are
- preregistered or registered by our upstream suppliers, and/or
- preregistered 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.
Not applicable

VOC-CH (VOCV) : no VOC duties

VOC-EU (solvent) : Not applicable

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

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 difficulties if inhaled.
H335	May cause respiratory irritation.
H351	Suspected of causing cancer.
H373	May cause damage to organs through prolonged or repeated exposure.

Full text of other abbreviations

Acute Tox.	Acute toxicity
Carc.	Carcinogenicity
Eye Irrit.	Eye irritation
Resp. Sens.	Respiratory sensitisation
Skin Irrit.	Skin irritation
Skin Sens.	Skin sensitisation
STOT RE	Specific target organ toxicity - repeated exposure
STOT SE	Specific target organ toxicity - single exposure
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:

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
STOT RE 2	H373

Classification procedure:

Calculation method
Calculation method
Calculation method
Calculation method
Calculation method
Calculation method
Calculation method
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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 !