

**1. PRODUCT AND COMPANY IDENTIFICATION**

Product Code SKFX291
Product Name Sikaflex 291
Product Description One component moisture curing polyurethane based sealant/adhesive for marine applications.
Manufacturer/Supplier Sika Limited
Watchmead
Welwyn Garden City
Hertfordshire.
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2. COMPOSITION/INFORMATION ON THE COMPONENTS**Preparation - Hazardous ingredients (Europe)**

Component	CAS/EINECS	Concentration	Classification	Risk Phrases
Naphtha (Petroleum)Hydrosulphurised Heavy	64742-82-1	1.00% - 2.50%	Xn, N	R10, R51/53, R65, R66, R67
Xylene	1330-20-7	1.00% - 2.50%	Xn	R10, R20/21, R38
4, 4- methylenediphenyl diisocyanate	101-68-8	0.10% - 1.00%	Xn	R20, R36/37/38, R42/43

3. HAZARD IDENTIFICATION

Main Hazards May cause sensitisation by inhalation.

4. FIRST AID MEASURES

Eye Contact Immediately flood the eye with plenty of water for at least 15 minutes, holding the eye open. Obtain medical attention urgently.

Skin Contact Wipe off as much as possible with a clean dry cloth. Wash skin thoroughly with soap and water. Solvents should not be used to clean skin because they may increase the penetration of the material. Contaminated clothing should be washed or dry-cleaned before re-use.

Ingestion Do not induce vomiting. Wash out mouth with water. Obtain medical attention.

Inhalation Unlikely to occur.However provide symptomatic medical treatment if required.

5. FIRE FIGHTING MEASURES

Extinguishing Media Use water spray, foam, dry chemical or carbon dioxide.

Special Hazards of Product Combustion will release oxides of carbon and nitrogen with possible HCl

Protective Equipment for Fire-Fighting Wear full protective clothing and self-contained breathing apparatus.

**6. ACCIDENTAL RELEASE MEASURES**

<i>Personal Precautions</i>	Wear appropriate protective clothing.
<i>Environmental Precautions and Clean-up Methods</i>	Try to prevent the material from entering drains or water courses.
<i>Spillages</i>	Remove spilled/leaked product by scraping from surfaces. Allow to solidify normally. Clean surfaces with a suitable solvent.

7. HANDLING AND STORAGE

<i>Handling</i>	Exposure by inhalation or skin contact should be minimised by good Industrial Hygiene practices. Avoid contact with eyes, skin and clothing. Use in well ventilated area.
<i>Storage</i>	Storage area should be: cool. dry. Storage temperature should be controlled to between 5 and 25 °C.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION**Occupational Exposure Limits - GB**

Xylene	UK EH40: WEL 50ppm (220mg/m ³) 8h TWA. UK EH40: WEL 100ppm (441mg/m ³) 15min STEL
4, 4- methylenediphenyl diisocyanate	UK EH40: WEL 0.02mg/m ³ 8h TWA. UK EH40: WEL 0.07mg/m ³ 15min STEL.

<i>Engineering Control Measures</i>	Use of the basic principles of Industrial Hygiene will enable this material to be used safely.
<i>Respiratory Protection</i>	If limits are exceeded use an approved respirator suitable for the purpose.
<i>Hand Protection</i>	Wear suitable impervious gloves.
<i>Eye Protection</i>	Wear safety glasses if risks of accidental contamination are possible during application.

9. PHYSICAL AND CHEMICAL PROPERTIES

<i>Physical State</i>	Paste.
<i>Color</i>	Various
<i>Odor</i>	Characteristic.
<i>Flash Point °C</i>	> 65
<i>Solubility - Water</i>	Insoluble.
<i>Density (kg/m³)</i>	Approx. 1260 at 20 °C.
<i>Viscosity (at 20°C)</i>	Thixotropic paste

10. STABILITY AND REACTIVITY

<i>Stability</i>	Stable under normal conditions.
<i>Conditions to avoid</i>	Exposure to water or moisture.
<i>Hazardous Decomposition Products</i>	Reaction with water or moist air may produce: carbon dioxide formation resulting in pressure increase in bulk containers (risk of bursting). Combustion may also generate: oxides of carbon. oxides of nitrogen. ,hydrogen chloride.

**11. TOXICOLOGICAL INFORMATION**

<i>Acute toxicity</i>	Low order of acute toxicity.
<i>Skin irritation</i>	Persons known to be hypersensitive (asthma, chronic bronchitis, etc.) should refrain from handling the product. Frequent or prolonged skin contact may cause some local short term skin irritation.
<i>Sensitization - Skin</i>	The possibility of allergic sensitisation should be considered.

12. ECOLOGICAL INFORMATION

<i>Mobility</i>	Because of its high viscosity, low water solubility and low degree of toxicity, this material should not present any environmental problems.
<i>Ecotoxicity</i>	The product is expected to be non-hazardous to aquatic species.

13. DISPOSAL

<i>Product Disposal</i>	Hazardous waste. Disposal of bulk quantities and/or containers should be made through an authorised waste contractor.
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14. TRANSPORT INFORMATION

<i>ADR/RID : Proper shipping name</i>	Not Regulated under ADR/RID
<i>IMDG : Proper shipping name</i>	Not Regulated under IMDG
<i>IATA : Proper shipping name</i>	Not Regulated under ICAO

15. REGULATORY INFORMATION

<i>Label Requirements</i>	Harmful 
<i>Risk Phrases</i>	May cause sensitisation by inhalation.
<i>Safety Phrases</i>	Do not breathe gas/fumes/vapor/spray In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible). Contains isocyanates. See information supplied by the manufacturer.
<i>Contains</i>	4,4-methylenediphenyl diisocyanate

16. OTHER INFORMATION

<i>First Issue Date</i>	04.10.1995
<i>Revisions Highlighted</i>	Composition/Information on the Components Exposure Controls/Personal Protection regulatory Information
<i>Uses and Restrictions</i>	Customers are urged to ensure that the product is entirely suitable for their own purpose. It is the customer's responsibility to ensure that a suitable and sufficient assessment of the risks created by the use of the product is undertaken.



SAFETY DATA SHEET

Sikaflex 291

Date of issue - 06/07/2005.

SKFX291

UK Legislation

Health and Safety at Work etc Act, 1974, and relevant Statutory Provisions.

SI 2002/1689: Chemicals (Hazard Information and Packaging) Regulations, 1993.

SI 2002/2677: The Control of Substances Hazardous to Health Regulations

SI No 2839 1991 Environmental Protection (Duty of Care) Regulations.

UK Guidance Publications

SI No. 972/1996: The Special Waste Regulations 1996
General Approved Code of Practice to COSHH Regulations, HSE.
EH40, Occupational Exposure Limits, HSE. Revised Annually.

Footnote

The information contained in this SDS 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 Technical Data Sheet prior to use.