

**1. PRODUCT AND COMPANY IDENTIFICATION**

Product Code SKD53A
Product Name Sikadur 53 Part A
Product Description 2-component, solvent free, epoxy resin for underwater injection systems.
Manufacturer/Supplier Sika Limited
Watchmead
Welwyn Garden City
Hertfordshire.
AL7 1BQ
tel. 01707 394444
Fax. 01707 329129

2. COMPOSITION/INFORMATION ON THE COMPONENTS**Preparation - Hazardous ingredients (Europe)**

Component	CAS/EINECS	Concentration	Classification	Risk Phrases
Epoxy resin (No.Av. mol.wt. < 700)	25068-38-6	10.00% - 25.00%	Xi, N	R36/38, R43, R51/53
Aliphatic glycidyl ether	68609-97-2	2.50% - 10.00%	Xi, N	R36/38, R43, R51/53
Solvent Naptha (petroleum) heavy aromatic.	64742-94-5	1.00% - 2.50%	Xn, N	R51/53, R65, R66

3. HAZARD IDENTIFICATION

Main Hazards Irritating to eyes and skin.
May cause sensitisation by skin contact.
Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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.

Ingestion Wash out mouth with water. Obtain medical attention.

Inhalation Remove from exposure. In cases of possible respiratory irritation or if feeling unwell in cases of prolonged exposure, obtain medical attention.

5. FIRE FIGHTING MEASURES

Extinguishing Media Not readily combustible.
Use foam, dry chemical or carbon dioxide.

Extinguishing Media - Not suitable Do not use water jet.

Special Hazards of Product Combustion will produce smoke, carbon dioxide and carbon monoxide.

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



SAFETY DATA SHEET

Sikadur 53 Part A

Date of issue - 17/06/2005.

SKD53A

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>	Contain and absorb using earth, sand or other inert material. Transfer into suitable containers for recovery or disposal.

7. HANDLING AND STORAGE

<i>Handling</i>	Use in well ventilated area. Avoid contact with eyes, skin and clothing.
<i>Storage</i>	Storage area should be: cool. dry. Storage temperature should be controlled to between 5 and 25 °C. Store in the original container securely closed . Keep away from foodstuffs

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

<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>	Respiratory protection not normally required.
<i>Hand Protection</i>	Wear suitable impervious gloves. (butyl / nitrile type) The insides of gloves must be kept scrupulously clean.
<i>Eye Protection</i>	Chemical goggles.

9. PHYSICAL AND CHEMICAL PROPERTIES

<i>Physical State</i>	Viscous liquid.
<i>Color</i>	Green.
<i>Odor</i>	Faint. Characteristic.
<i>Flash Point °C</i>	Exceeds 100.
<i>Solubility - Water</i>	Insoluble.
<i>Density (kg/m³)</i>	Approx. 2250 at 20 °C.
<i>Autoignition Temperature °C</i>	Above 250.
<i>Viscosity (at 20°C)</i>	Viscous liquid at ambient temperatures.

10. STABILITY AND REACTIVITY

<i>Stability</i>	Stable under normal conditions.
<i>Hazardous Decomposition Products</i>	Heating may produce: oxides of carbon. acrid smoke and irritating fumes.

11. TOXICOLOGICAL INFORMATION

<i>Acute toxicity</i>	Low order of acute toxicity.
<i>Eye irritation</i>	Irritating to the eyes.
<i>Skin irritation</i>	Frequent or prolonged skin contact may cause some local short term skin irritation.
<i>Sensitization - Skin</i>	The low molecular weight epoxy resin is a potential skin sensitizer.



SAFETY DATA SHEET

Sikadur 53 Part A

Date of issue - 17/06/2005.

SKD53A

12. ECOLOGICAL INFORMATION

<i>Mobility</i>	The product is insoluble in water.
<i>Persistence/degradability</i>	The product is expected to be not readily biodegradable.
<i>Ecotoxicity</i>	This material is harmful to aquatic organisms.

13. DISPOSAL

<i>Product Disposal</i>	Hazardous waste. Arrange for disposal via a licensed waste contractor.
<i>Container Disposal</i>	Dispose of containers with care. Empty containers may contain hazardous residues. Empty packaging should be removed by a licensed waste contractor.

14. TRANSPORT INFORMATION

<i>UN : UN number</i>	3077
<i>UN : Proper shipping name</i>	Environmentally hazardous substances, solid, n.o.s.
<i>UN : Class</i>	9
<i>UN : Packing Group</i>	3
<i>ADR/RID : Number</i>	3077
<i>ADR/RID : Proper shipping name</i>	Environmentally hazardous substance, solid, n.o.s.
<i>ADR/RID : Class</i>	9
<i>ADR/RID : Item Number</i>	11 (c) Class M7
<i>ADR/RID : Hazard Identification Number</i>	90
<i>IMDG : Proper shipping name</i>	Environmentally hazardous substance, solid, N.O.S. contains Epoxy Resin
<i>IMDG : Packing Group</i>	3
<i>IMDG : Class</i>	9
<i>IMDG : Ems Number</i>	F-A, S-F
<i>IATA : Proper shipping name</i>	Environmentally hazardous substance, solid, N.O.S. contains Epoxy Resin
<i>IATA : Packing Group</i>	3
<i>IATA : Class</i>	9

15. REGULATORY INFORMATION

Label Requirements Irritant, Dangerous for the environment



Risk Phrases Irritating to eyes and skin.
May cause sensitisation by skin contact.
Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety Phrases Avoid contact with skin.
Wear suitable gloves.

Contains epoxy constituents. See information supplied by the manufacturer.



SAFETY DATA SHEET
Sikadur 53 Part A

Date of issue - 17/06/2005.

SKD53A

Contains

reaction product: bisphenol A-(epichlorhydrin)
epoxy resin (no av mol wt <= 700)
oxirane, mono[(C12-14-alkyloxy)methyl]derivs.

16. OTHER INFORMATION

First Issue Date

04.05.1995

Revisions Highlighted

Composition and Information on Ingredients

Uses and Restrictions

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.

UK Legislation

Health and Safety at Work etc Act, 1974, and relevant Statutory Provisions.
SI 2002/1689: Chemicals (Hazard Information and Packaging) Regulations
SI 2002/2677: The Control of Substances Hazardous to Health Regulations
SI No. 972/1996: The Special Waste Regulations 1996
SI No 2839 1991 Environmental Protection (Duty of Care) Regulations.

UK Guidance Publications

Approved Code of Practice - Management of Health and Safety at Work, HSE.
General Approved Code of Practice to COSHH Regulations, HSE.

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.

**1. PRODUCT AND COMPANY IDENTIFICATION**

Product Code	SKD53B
Product Name	Sikadur 53 Part B
Product Description	2-component, solvent free, epoxy resin for underwater injection systems.
Manufacturer/Supplier	Sika Limited Watchmead Welwyn Garden City Hertfordshire. AL7 1BQ tel. 01707 394444 Fax. 01707 329129

2. COMPOSITION/INFORMATION ON THE COMPONENTS**Preparation - Hazardous ingredients (Europe)**

Component	CAS/EINECS	Concentration	Classification	Risk Phrases
Benzyl Alcohol	100-51-6	25.00% - 50.00%	Xn	R20/22
Isophoronediamine	2855-13-2	10.00% - 25.00%	C	R21/22, R34, R43, R52/53
Triethylenetetramine	112-24-3	10.00% - 25.00%	C	R21, R34, R43, R52/53
2,4,6-Tri(dimethylaminomethyl) phenol	90-72-2	2.50% - 10.00%	Xn	R22, R36/38
Polyaminoimidazoline		2.50% - 10.00%	Xi	R41
bis[(dimethylamino) methyl] phenol	71074-89-0	1.00% - 2.50%	C	R34
3,6,9-triazaundecamethylenediamine	112-57-2	0.10% - 1.00%	C, N	R21/22, R34, R43, R51/53

3. HAZARD IDENTIFICATION

Main Hazards	Causes burns. May cause sensitisation by skin contact. Harmful by inhalation, in contact with skin and if swallowed. Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
---------------------	---

4. FIRST AID MEASURES

Eye Contact	Immediately flood the eye with plenty of water for at least 15 minutes, holding the eye open. Eyelids should be held away from the eyeball to ensure thorough rinsing. Obtain medical attention urgently.
Skin Contact	Wipe off as much as possible with a clean dry cloth. If material proves difficult to remove, use suitable skin cleanser (not solvent). 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. Obtain medical attention.
Inhalation	Remove from exposure. In cases of possible respiratory irritation or if feeling unwell in cases of prolonged exposure, obtain medical attention.



5. FIRE FIGHTING MEASURES

<i>Extinguishing Media</i>	Not readily combustible. Use foam, dry chemical or carbon dioxide.
<i>Extinguishing Media - Not suitable</i>	Do not use water jet.
<i>Special Hazards of Product</i>	Thermal decomposition or burning may release oxides of carbon, nitrogen and other toxic gases and vapours.
<i>Protective Equipment for Fire-Fighting</i>	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>	Contain and absorb using earth, sand or other inert material. Transfer into suitable containers for recovery or disposal.

7. HANDLING AND STORAGE

<i>Handling</i>	Mix in a well ventilated area. Avoid contact with eyes, skin and clothing.
<i>Storage</i>	Storage area should be: cool. dry. Storage temperature should be controlled to between 5 and 25 °C. Store in the original container securely closed. Keep away from foodstuffs

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

<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>	Respiratory protection not normally required.
<i>Hand Protection</i>	Wear suitable impervious gloves. (butyl / nitrile type) The insides of gloves must be kept scrupulously clean.
<i>Eye Protection</i>	Chemical goggles.

9. PHYSICAL AND CHEMICAL PROPERTIES

<i>Physical State</i>	Liquid.
<i>Color</i>	Amber.
<i>Odor</i>	Amine like.
<i>pH</i>	Approx. 12 in water.
<i>Boiling Point °C</i>	> 200.
<i>Flash Point °C</i>	> 100
<i>Explosion Limits (%)</i>	Lower limit 1.0 Upper limit 6.0.
<i>Vapor Pressure (kPa)</i>	Negligible vapour pressure at ambient conditions.
<i>Density (kg/m3)</i>	Approx. 1000 at 20 °C.
<i>Autoignition Temperature °C</i>	300
<i>Viscosity (at 20°C)</i>	Mobile liquid at ambient temperatures.



SAFETY DATA SHEET

Sikadur 53 Part B

Date of issue - 04/10/2005.

SKD53B

10. STABILITY AND REACTIVITY

<i>Stability</i>	Stable under normal conditions.
<i>Hazardous Decomposition Products</i>	Heating may produce: ammonia. oxides of carbon. oxides of nitrogen. acrid smoke and irritating fumes.

11. TOXICOLOGICAL INFORMATION

<i>Acute toxicity</i>	Low order of acute toxicity.
<i>Eye irritation</i>	This material is corrosive to the eye.
<i>Skin irritation</i>	This material is corrosive to the skin.
<i>Sensitization - Skin</i>	The possibility of allergic sensitisation should be considered

12. ECOLOGICAL INFORMATION

<i>Mobility</i>	The product is sparingly soluble in water.
<i>Persistence/degradability</i>	The product is expected to be not readily biodegradable.
<i>Ecotoxicity</i>	This material is harmful to aquatic organisms.

13. DISPOSAL

<i>Product Disposal</i>	Hazardous waste. Arrange for disposal via a licensed waste contractor.
<i>Container Disposal</i>	Empty containers may contain hazardous residues. Dispose of containers with care. Empty packaging should be removed by a licensed waste contractor.

14. TRANSPORT INFORMATION

<i>UN :</i>	<i>UN number</i>	1760
<i>UN :</i>	<i>Proper shipping name</i>	Corrosive liquid, n.o.s.
<i>UN :</i>	<i>Class</i>	8
<i>UN :</i>	<i>Packing Group</i>	3
<i>ADR/RID :</i>	<i>Number</i>	1760
<i>ADR/RID :</i>	<i>Proper shipping name</i>	Corrosive liquid, n.o.s.
<i>ADR/RID :</i>	<i>Class</i>	contains Triethylenetetramine
<i>ADR/RID :</i>	<i>Item Number</i>	66(c) Class C9
<i>ADR/RID :</i>	<i>Hazard Identification Number</i>	80
<i>IMDG :</i>	<i>Proper shipping name</i>	Corrosive liquid, N.O.S. contains Triethylenetetramine
<i>IMDG :</i>	<i>Packing Group</i>	3
<i>IMDG :</i>	<i>Class</i>	8
<i>IMDG :</i>	<i>Marine Pollutant</i>	P
<i>IMDG :</i>	<i>Ems Number</i>	F-A, S-B
<i>IATA :</i>	<i>Proper shipping name</i>	Corrosive liquid, N.O.S. contains Triethylenetetramine
<i>IATA :</i>	<i>Packing Group</i>	3
<i>IATA :</i>	<i>Class</i>	8



SAFETY DATA SHEET

Sikadur 53 Part B

Date of issue - 04/10/2005.

SKD53B

15. REGULATORY INFORMATION

Label Requirements

Corrosive



Risk Phrases

Causes burns.
May cause sensitisation by skin contact.
Harmful by inhalation, in contact with skin and if swallowed.
Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety Phrases

Avoid contact with skin.
In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).
Wear suitable protective clothing, gloves and eye/face protection.

Contains

Benzyl alcohol
3-aminomethyl-3,5,5-trimethylcyclohexylamine
3,6-diazaoctanethylenediamine

16. OTHER INFORMATION

First Issue Date

04.05.1995

Revisions Highlighted

Composition / information on ingredients

Uses and Restrictions

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.

UK Legislation

Health and Safety at Work etc Act, 1974, and relevant Statutory Provisions.
SI 2002/1689 Chemicals (Hazard Information and Packaging) Regulations, 2002.
SI 2002/2677: The Control of Substances Hazardous to Health Regulations
SI No. 972/1996: The Special Waste Regulations 1996
SI No 2839 1991 Environmental Protection (Duty of Care) Regulations.

UK Guidance Publications

Approved Code of Practice - Management of Health and Safety at Work, HSE.
General Approved Code of Practice to COSHH Regulations, HSE.

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.