



SAFETY DATA SHEET

ARALDITE PRECISION RESIN

According to Regulation (EC) No 1907/2006

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name ARALDITE PRECISION RESIN
 Product No. 80807, 80809

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

1.3. Details of the supplier of the safety data sheet

Supplier BOSTIK LIMITED
 COMMON ROAD
 STAFFORD
 STAFFORDSHIRE
 ST16 3EH
 +44 1785 272625
 sds.uk@bostik.com

1.4. Emergency telephone number

+44 1785 272650 (24 Hours)

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification (1999/45/EEC) Xi;R36/38. R43. N;R51/53.

2.2. Label elements

Contains BISPHENOL A - EPOXY RESINS, (Number Average Molecular Weight >700 - <1100)
 BISPHENOL A-EPICHLOROHYDRIN EPOXY RESIN (NUMBER AV MW<700)
 BISPHENOL F EPOXY RESIN

Labelling



Irritant



Dangerous for the environment

Risk Phrases

R36/38	Irritating to eyes and skin.
R43	May cause sensitisation by skin contact.
R51/53	Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Safety Phrases

S2	Keep out of the reach of children.
S24/25	Avoid contact with skin and eyes.
S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S29/56	Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point.
S36/37/39	Wear suitable protective clothing, gloves and eye/face protection.
S46	If swallowed, seek medical advice immediately and show this container or label.

ARALDITE PRECISION RESIN

S61

Avoid release to the environment. Refer to special instructions/safety data sheets.

P5

Contains epoxy constituents. See information supplied by the manufacturer.

2.3. Other hazards

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

BISPHENOL A - EPOXY RESINS, (Number Average Molecular Weight >700 - <1100)		1-5%
CAS-No.: 25068-38-6	EC No.: 500-033-5	
Classification (EC 1272/2008) Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Skin Sens. 1 - H317	Classification (67/548/EEC) Xi;R36/38. R43.	
BISPHENOL A-EPICHLOROHYDRIN EPOXY RESIN (NUMBER AV MW<700)		60-100%
CAS-No.: 25068-38-6	EC No.: 500-033-5	Registration Number: 05-2114287500-52
Classification (EC 1272/2008) Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Skin Sens. 1 - H317 Aquatic Chronic 2 - H411	Classification (67/548/EEC) Xi;R36/38. N;R51/53. R43.	
BISPHENOL F EPOXY RESIN		5-10%
CAS-No.: 9003-36-5	EC No.:	
Classification (EC 1272/2008) Skin Irrit. 2 - H315 Eye Irrit. 2 - H319 Skin Sens. 1 - H317 Aquatic Chronic 2 - H411	Classification (67/548/EEC) Xi;R36/38. N;R51/53. R43.	

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

Inhalation

Remove victim immediately from source of exposure. Move the exposed person to fresh air at once. Get medical attention if any discomfort continues.

Ingestion

DO NOT induce vomiting. Get medical attention immediately.

Skin contact

Promptly flush contaminated skin with water. Promptly remove clothing if soaked through and flush the skin with water. Get medical attention if irritation persists after washing.

Eye contact

Rinse the eye with water immediately. Continue to rinse for at least 15 minutes and get medical attention.

4.2. Most important symptoms and effects, both acute and delayed

4.3. Indication of any immediate medical attention and special treatment needed

ARALDITE PRECISION RESIN

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media

Use fire-extinguishing media appropriate for surrounding materials.

5.2. Special hazards arising from the substance or mixture

Specific hazards

Fire or high temperatures create: Toxic gases/vapours/fumes of: Carbon dioxide (CO₂). Carbon monoxide (CO).

5.3. Advice for firefighters

Special Fire Fighting Procedures

Keep run-off water out of sewers and water sources. Dike for water control. If risk of water pollution occurs, notify appropriate authorities.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Avoid skin and eye contact. Ensure adequate ventilation.

6.2. Environmental precautions

Prevent entry into drains and water courses.

6.3. Methods and material for containment and cleaning up

Absorb in vermiculite, dry sand or earth and place into containers.

6.4. Reference to other sections

SECTION 7: HANDLING AND STORAGE

7.1. Precautions for safe handling

Avoid spilling, skin and eye contact. Persons susceptible to allergic reactions should not handle this product. Ventilate well, avoid breathing vapours. Use approved respirator if air contamination is above accepted level.

7.2. Conditions for safe storage, including any incompatibilities

Store in tightly closed original container in a dry, cool and well-ventilated place. Keep in original container.

Storage Class

Chemical storage.

7.3. Specific end use(s)

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Ingredient Comments

WEL = Workplace Exposure Limits

8.2. Exposure controls

Protective equipment



Engineering measures

Provide adequate general and local exhaust ventilation.

Respiratory equipment

No specific recommendation made, but respiratory protection must be used if the general level exceeds the recommended occupational exposure limit.

ARALDITE PRECISION RESIN

Hand protection

Protective gloves should be used if there is a risk of direct contact or splash. Use protective gloves made of: Nitrile.

Eye protection

Wear splash-proof eye goggles to prevent any possibility of eye contact.

Other Protection

Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapour contact. Provide eyewash station.

Hygiene measures

DO NOT SMOKE IN WORK AREA! Wash hands at the end of each work shift and before eating, smoking and using the toilet. Wash promptly if skin becomes wet or contaminated. Promptly remove any clothing that becomes contaminated. When using do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance	Paste
Odour	Slight odour.
Solubility	Insoluble in water
Initial boiling point and boiling range (°C)	>200
Relative density	1.15 - 1.25 @ 25 °c
Vapour pressure	< 0.1 Pa @ 20 °c
pH-Value, Conc. Solution	Approx 6
Viscosity	30 - 50 Pas @ 25 °c
Flash point (°C)	210 CC (Closed cup).

9.2. Other information

SECTION 10: STABILITY AND REACTIVITY

10.1. Reactivity

10.2. Chemical stability

Stable under normal temperature conditions.

10.3. Possibility of hazardous reactions

10.4. Conditions to avoid

Avoid contact with strong oxidisers. Avoid contact with acids and alkalis.

10.5. Incompatible materials

10.6. Hazardous decomposition products

Fire or high temperatures create: Carbon monoxide (CO). Carbon dioxide (CO₂).

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Inhalation

Vapour may irritate respiratory system or lungs.

Ingestion

May cause discomfort if swallowed.

Skin contact

Liquid may irritate skin. May cause sensitisation by skin contact.

Eye contact

Irritating to eyes.

ARALDITE PRECISION RESIN

Medical Considerations
Skin disorders and allergies.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

Dangerous for the environment: May cause long-term adverse effects in the aquatic environment.

12.1. Toxicity

12.2. Persistence and degradability

12.3. Bioaccumulative potential

12.4. Mobility in soil

12.5. Results of PBT and vPvB assessment

12.6. Other adverse effects

SECTION 13: DISPOSAL CONSIDERATIONS

General information

This material is classified as special waste as defined by Special Waste Regulations 1996 and must be disposed of by an authorised contractor

13.1. Waste treatment methods

Dispose of waste and residues in accordance with local authority requirements.

SECTION 14: TRANSPORT INFORMATION

14.1. UN number

UN No. (ADR/RID/ADN)	3082
UN No. (IMDG)	3082
UN No. (ICAO)	3082

14.2. UN proper shipping name

Proper Shipping Name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (BISPHENOL A-EPICHLOROHYDRIN EPOXY RESIN (NUMBER AV MW<700), BISPHENOL F EPOXY RESIN)

14.3. Transport hazard class(es)

ADR/RID/ADN Class	9
ADR/RID/ADN Class	Class 9: Miscellaneous dangerous substances and articles.
ADR Label No.	9
IMDG Class	9
ICAO Class/Division	9
Transport Labels	



14.4. Packing group

ADR/RID/ADN Packing group III

ARALDITE PRECISION RESIN

IMDG Packing group III
ICAO Packing group III

14.5. Environmental hazards

Environmentally Hazardous Substance/Marine Pollutant



14.6. Special precautions for user

EMS F-A, S-F
Emergency Action Code •3Z
Hazard No. (ADR) 90
Tunnel Restriction Code (E)

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

SECTION 15: REGULATORY INFORMATION

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

Statutory Instruments

The Chemicals (Hazard Information and Packaging for Supply) Regulations 2009 (S.I 2009 No. 716). Control of Substances Hazardous to Health.

Approved Code Of Practice

Safety Data Sheets for Substances and Preparations. Classification and Labelling of Substances and Preparations Dangerous for Supply.

Guidance Notes

Workplace Exposure Limits EH40. CHIP for everyone HSG(108).

EU Legislation

Dangerous Substance Directive 67/548/EEC. Dangerous Preparations Directive 1999/45/EC. Regulation (EC) No 1272/2008 of the European Parliament and of the Council of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006 with amendments.

15.2. Chemical Safety Assessment

SECTION 16: OTHER INFORMATION

General information

This product should be used as directed by Bostik Ltd. For further information consult the product data sheet or contact Technical Services.

Information Sources

This safety data sheet was compiled using current safety information supplied by distributor of raw materials.

Revision Comments

NOTE: Lines within the margin indicate significant changes from the previous revision. This safety data sheet supersedes all previous issues and users are cautioned to ensure that it is current. Destroy all previous data sheets and if in doubt contact Bostik Limited.

Issued By Approved LJ

Revision Date March 2013

Revision 6

Date November 2004

Risk Phrases In Full

R36/38 Irritating to eyes and skin.

R43 May cause sensitisation by skin contact.

R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

ARALDITE PRECISION RESIN

Hazard Statements In Full

H319	Causes serious eye irritation.
H315	Causes skin irritation.
H317	May cause an allergic skin reaction.
H411	Toxic to aquatic life with long lasting effects.



SAFETY DATA SHEET

ARALDITE PRECISION HARDENER

According to Regulation (EC) No 1907/2006

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1. Product identifier

Product name ARALDITE PRECISION HARDENER
 Product No. 80807, 80809

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

1.3. Details of the supplier of the safety data sheet

Supplier BOSTIK LIMITED
 COMMON ROAD
 STAFFORD
 STAFFORDSHIRE
 ST16 3EH
 +44 1785 272625
 sds.uk@bostik.com

1.4. Emergency telephone number

SECTION 2: HAZARDS IDENTIFICATION

2.1. Classification of the substance or mixture

Classification (1999/45/EEC) Xi;R36/38. R43.

2.2. Label elements

Contains N(3-DIMETHYLAMINOPROPYL)-1,3-PROPYLENEDIAMINE

Labelling



Irritant

Risk Phrases

R36/38	Irritating to eyes and skin.
R43	May cause sensitisation by skin contact.

Safety Phrases

S24/25	Avoid contact with skin and eyes.
S26	In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
S36/37/39	Wear suitable protective clothing, gloves and eye/face protection.
S60	This material and its container must be disposed of as hazardous waste.

2.3. Other hazards

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.2. Mixtures

ARALDITE PRECISION HARDENER

N(3-DIMETHYLAMINOPROPYL)-1,3-PROPYLENEDIAMINE		5-10%
CAS-No.: 10563-29-8	EC No.:	
Classification (EC 1272/2008) Acute Tox. 4 - H302 Acute Tox. 4 - H312 Skin Corr. 1B - H314 Skin Sens. 1 - H317	Classification (67/548/EEC) Xn;R21/22. C;R34. R43.	

The Full Text for all R-Phrases and Hazard Statements are Displayed in Section 16.

SECTION 4: FIRST AID MEASURES

4.1. Description of first aid measures

Inhalation

Remove victim immediately from source of exposure. Move the exposed person to fresh air at once. Get medical attention if any discomfort continues.

Ingestion

DO NOT induce vomiting. Get medical attention immediately.

Skin contact

Promptly flush contaminated skin with water. Promptly remove clothing if soaked through and flush the skin with water. Get medical attention if irritation persists after washing.

Eye contact

Rinse the eye with water immediately. Continue to rinse for at least 15 minutes and get medical attention.

4.2. Most important symptoms and effects, both acute and delayed

4.3. Indication of any immediate medical attention and special treatment needed

SECTION 5: FIREFIGHTING MEASURES

5.1. Extinguishing media

Extinguishing media

Use fire-extinguishing media appropriate for surrounding materials.

5.2. Special hazards arising from the substance or mixture

Specific hazards

Fire or high temperatures create: Toxic gases/vapours/fumes of: Carbon monoxide (CO). Carbon dioxide (CO₂).

5.3. Advice for firefighters

Protective equipment for fire-fighters

Wear self contained breathing apparatus

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1. Personal precautions, protective equipment and emergency procedures

Avoid skin and eye contact. Ensure adequate ventilation. Wear personal protective equipment. Avoid breathing vapour

6.2. Environmental precautions

Prevent entry into drains and water courses.

6.3. Methods and material for containment and cleaning up

Absorb in vermiculite, dry sand or earth and place into containers.

6.4. Reference to other sections

SECTION 7: HANDLING AND STORAGE

ARALDITE PRECISION HARDENER

7.1. Precautions for safe handling

Avoid spilling, skin and eye contact. Persons susceptible to allergic reactions should not handle this product. Ventilate well, avoid breathing vapours. Use approved respirator if air contamination is above accepted level.

7.2. Conditions for safe storage, including any incompatibilities

Store in tightly closed original container in a dry, cool and well-ventilated place. Keep in original container.

Storage Class

Chemical storage.

7.3. Specific end use(s)

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1. Control parameters

Ingredient Comments

WEL = Workplace Exposure Limits

8.2. Exposure controls

Protective equipment



Engineering measures

Provide adequate general and local exhaust ventilation.

Respiratory equipment

No specific recommendation made, but respiratory protection must be used if the general level exceeds the recommended occupational exposure limit.

Hand protection

Protective gloves must be used if there is a risk of direct contact or splash. Use protective gloves made of: Rubber, neoprene or PVC.

Eye protection

Use approved safety goggles or face shield.

Other Protection

Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapour contact. Provide eyewash station.

Hygiene measures

DO NOT SMOKE IN WORK AREA! Wash hands at the end of each work shift and before eating, smoking and using the toilet. Wash promptly if skin becomes wet or contaminated. Promptly remove any clothing that becomes contaminated. When using do not eat, drink or smoke.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1. Information on basic physical and chemical properties

Appearance	Liquid
Colour	Colourless to pale yellow.
Odour	Slight odour.
Solubility	Insoluble in water
Initial boiling point and boiling range (°C)	>200
Relative density	0.95 @ 25 °c
Vapour pressure	4 Pa @ 20 °c
Flash point (°C)	110

9.2. Other information

SECTION 10: STABILITY AND REACTIVITY

ARALDITE PRECISION HARDENER

10.1. Reactivity

10.2. Chemical stability

Stable under normal temperature conditions.

10.3. Possibility of hazardous reactions

10.4. Conditions to avoid

Avoid heat, flames and other sources of ignition. Avoid contact with strong oxidisers.

10.5. Incompatible materials

10.6. Hazardous decomposition products

Fire or high temperatures create: Carbon monoxide (CO). Carbon dioxide (CO₂).

SECTION 11: TOXICOLOGICAL INFORMATION

11.1. Information on toxicological effects

Inhalation

Irritating to respiratory system.

Ingestion

May cause discomfort if swallowed.

Skin contact

Irritating to skin. May cause sensitisation by skin contact.

Eye contact

Irritating to eyes.

Medical Considerations

Skin disorders and allergies.

SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity

Not regarded as dangerous for the environment. However, contamination of the aquatic or terrestrial environments should be avoided

12.1. Toxicity

12.2. Persistence and degradability

12.3. Bioaccumulative potential

12.4. Mobility in soil

12.5. Results of PBT and vPvB assessment

12.6. Other adverse effects

SECTION 13: DISPOSAL CONSIDERATIONS

13.1. Waste treatment methods

Dispose of waste and residues in accordance with local authority requirements.

SECTION 14: TRANSPORT INFORMATION

General

The product is not covered by international regulation on the transport of dangerous goods (IMDG, IATA, ADR/RID).

ARALDITE PRECISION HARDENER

14.1. UN number

Not applicable.

14.2. UN proper shipping name

Not applicable.

14.3. Transport hazard class(es)

Transport Labels

No transport warning sign required.

14.4. Packing group

Not applicable.

14.5. Environmental hazards

Environmentally Hazardous Substance/Marine Pollutant

No.

14.6. Special precautions for user

Not applicable.

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code

Not applicable.

SECTION 15: REGULATORY INFORMATION

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

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Guidance Notes

CHIP for everyone HSG(108). Workplace Exposure Limits EH40.

EU Legislation

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15.2. Chemical Safety Assessment

SECTION 16: OTHER INFORMATION

General information

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Issued By Approved LJ

Revision Date March 2013

Revision 7

Date December 2002

ARALDITE PRECISION HARDENER

Risk Phrases In Full

R34	Causes burns.
R21/22	Harmful in contact with skin and if swallowed.
R36/38	Irritating to eyes and skin.
R43	May cause sensitisation by skin contact.

Hazard Statements In Full

H319	Causes serious eye irritation.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H302	Harmful if swallowed.
H312	Harmful in contact with skin.
H317	May cause an allergic skin reaction.