

SAFETY DATA SHEET ARALDITE RAPID RESIN

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY/UNDERTAKING

| PRODUCT NAME: | ARALDITE RAPID RESIN |
|-----------------------|--|
| PART No.: | 80806, 80808, 80817, 80819, 80811 |
| SUPPLIER: | BOSTIK FINDLEY LIMITED COMMON ROAD STAFFORD. ST16 3EH STAFFORDSHIRE Tel: +44 1785 272727 Fax: +44 1785 257236 |
| EMERGENCY TELEPHONES: | +44 1785 255141 +44 1785 272650 |

2. COMPOSITION/INFORMATION ON INGREDIENTS

| NAME | | | CONTENT |
|--|-------------|--------------------------|---------|
| CAS No.: | EINECS Nr.: | CLASSIFICATION | 5 40 0/ |
| BUTANEDIOLDIG | | V- D 20/24 20/20 42 | 5-10 % |
| 2425-79-8 | 219-371-7 | Xn R-20/21, 36/38, 43 | |
| BISPHENOL A -EPICHLOROHYDRIN EPOXY RESIN (NUMBER AV MW<700) 60-100 % | | 60-100 % | |
| 25068-38-6 | 500-033-5 | Xi ,N R-36/38, 43, 51/53 | |

The Full Text for all R-Phrases are Displayed in Section 16

3. HAZARDS IDENTIFICATION

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 MEAS | URES |
|-------------------|--|
| | |
| INHALATION: | Move the exposed person to fresh air at once. Get medical attention if any discomfort continues. |
| INGESTION: | DO NOT INDUCE VOMITING! NEVER MAKE AN UNCONSCIOUS PERSON VOMIT OR DRINK FLUIDS! Rinse mouth thoroughly. Get medical attention immediately! Provide rest, warmth and fresh air. |
| SKIN: | Remove affected person from source of contamination. Remove contaminated clothing. Wash the skin immediately with soap and water. Get medical attention promptly if symptoms occur after washing. |
| EYES: | Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes. Get medical attention promptly if symptoms occur after washing. |

5. FIRE FIGHTING MEASURES

| EXTINGUISHING MEDIA: | Use extinguishing media appropriate for surrounding fire. |
|--------------------------------------|--|
| 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. |
| HAZARDOUS COMBUSTION PRODUCTS: | Fire creates: Carbon monoxide (CO). Carbon dioxide (CO2). |

6. ACCIDENTAL RELEASE MEASURES

| SPILL CLEANUP METHODS: | Wear necessary protective equipment. Stop leak if possible without risk. DO NOT touch spilled material! Runoff or release to sewer, waterway or ground is forbidden. Absorb in vermiculite, dry sand or earth and place into containers. Flush area with plenty of water. Do not let washing down water contaminate ponds or waterways. |
|------------------------|---|
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| | |

7. HANDLING AND STORAGE

| | Avoid spilling, skin and eye contact. Provide good ventilation. Persons susceptible for allergic reactions should not handle this product. |
|----------------------|--|
| STORAGE PRECAUTIONS: | Keep in cool, dry, ventilated storage and closed containers. Keep in original container. |
| STORAGE CRITERIA: | Chemical storage. |

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

| INGREDIENT COMMENTS: | OES = Occu |
|-----------------------|------------|
| PROTECTIVE EQUIPMENT: | |
| | |

OES = Occupational Exposure Standard.



| VENTILATION: | Provide adequate general and local exhaust ventilation. |
|--------------------------|---|
| PROTECTIVE GLOVES: | Use protective gloves. |
| 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. |
| HYGIENIC WORK PRACTICES: | DO NOT SMOKE IN WORK AREA! Wash 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. No eating or drinking while working with this material. |

9. PHYSICAL AND CHEMICAL PROPERTIES

| APPEARANCE: | Liquid. | | |
|-------------------------------------|---------------|-------------------|----|
| COLOUR: | Light yellow. | | |
| ODOUR/TASTE: | Slight. | | |
| DENSITY/SPECIFIC GRAVITY (g/ml): | 1.17 | Temperature (°C): | 25 |
| FLASH POINT (°C): | > 200 | Method: | |

10. STABILITY AND REACTIVITY

| STABILITY: | Normally stable. |
|--------------------------------|---|
| CONDITIONS TO AVOID: | Avoid contact with strong oxidisers. |
| HAZARDOUS DECOMP. PRODUCTS: | Fire or high temperatures create: Carbon monoxide (CO). Carbon dioxide (CO2). |

11. TOXICOLOGICAL INFORMATION

| INHALATION: | Vapour may irritate respiratory system or lungs. |
|-------------------------|--|
| INGESTION: | May cause discomfort if swallowed. |
| SKIN: | Liquid may irritate skin. May cause sensitisation by skin contact. |
| EYES: | Irritating to eyes. |
| MEDICAL CONSIDERATIONS: | Skin disorders and allergies. |

12. ECOLOGICAL INFORMATION

| ECOLOGICAL INFORMATION: Dangerous environme | for the environment: May cause long-term adverse effects in the aquatic nt. |
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| | |

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHODS: Dispose of in accordance with Local Authority requirements.

14. TRANSPORT INFORMATION

LABEL FOR CONVEYANCE:



| UN No. ROAD: | 3082 |
|--------------------------|---|
| UK ROAD TRANSPORT CLASS: | 9 |
| UK ROAD PACK GR.: | 111 |
| ADR CLASS No.: | 9 |
| ADR CLASS: | Class 9: Miscellaneous dangerous substances and articles. |
| ADR PACK GR. | Ш |
| ADR LABEL No.: | 9 |
| HAZCHEM CODE: | 2X |
| CEFIC TEC(R) No.: | 90GM6-III |
| PROPER SHIPPING NAME I: | ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (BUTANEDIOLDIGLYCIDYL ETHER,) |
| RID CLASS No.: | 9 |
| RID PACK GR. | III |
| UN No. SEA: | 3082 |
| IMDG CLASS: | 9 |
| IMDG PACK GR.: | III |
| EmS No.: | None |
| MFAG TABLE No.: | See Guide |
| MARINE POLLUTANT: | No. |
| UN No., AIR: | 3082 |
| ICAO CLASS: | 9 |
| AIR PACK GR.: | III |

15. REGULATORY INFORMATION

LABEL FOR SUPPLY:



CONTAINSBISPHENOL A -EPICHLOROHYDRIN EPOXY RESIN (NUMBER AV MW<700)
BUTANEDIOLDIGLYCIDYL ETHERRISK PHRASES:R-36/38 Irritating to eyes and skin.
R-43 May cause sensitisation by skin contact.
R-51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the
aquatic environment.

| SAFETY PHRASES: | P-5 Contains epoxy constituents. See information supplied by the manufacturer. S-2 Keep out of the reach of children. S-24/25 Avoid contact with skin and eyes. S-28B After contact with skin, wash immediately with plenty of soap and water S-29/56 Do not empty into drains, dispose of this material and its container at hazardous or special waste collection point. S-36/37/39 Wear suitable protective clothing, gloves and eye/face protection. S-46 If swallowed, seek medical advice immediately and show this container or label. |
|----------------------------|---|
| APPROVED CODE OF PRACTICE: | Safety Data Sheets for Substances and Preparations L62. Classification and Labelling of Substances and Preparations Dangerous for Supply. |
| GUIDANCE NOTES: | Occupational Exposure Limits EH40. CHIP for everyone HSG(108). |

16. OTHER INFORMATION

| USER NOTES: | This product should be used as directed by Bostik Findley 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: | 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 Findley Limited. |
| ISSUED BY: | Approved ID |
| REVISION DATE: | Dec 2002 |
| REV. No./REPL. SDS GENERATED: | 1 |
| DATE: | Dec 2002 |
| PRINTING DATE: | 2003-03-07 |
| R-PHRASES (Full Text): | R-36/38 Irritating to eyes and skin. R-43 May cause sensitisation by skin contact. R-51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. R-20/21 Harmful by inhalation and in contact with skin. |



SAFETY DATA SHEET ARALDITE RAPID HARDENER

1. IDENTIFICATION OF THE SUBSTANCE/PREPARATION AND COMPANY/UNDERTAKING

| PRODUCT NAME: | ARALDITE RAPID HARDENER |
|-----------------------|--|
| PART No.: | 80806, 80808, 80811, 80817, 80819 |
| SUPPLIER: | BOSTIK FINDLEY LIMITED COMMON ROAD STAFFORD. ST16 3EH STAFFORDSHIRE Tel: +44 1785 272727 Fax: +44 1785 257236 |
| EMERGENCY TELEPHONES: | +44 1785 255141 +44 1785 272650 |

2. COMPOSITION/INFORMATION ON INGREDIENTS

| | | | CONTENT |
|--------------------------------|---------------------------------|------------------------------|---------|
| CAS No.: 1-(DIMETHYLAMINO | EINECS Nr.: ETHYL)-4-METHYLF | CLASSIFICATION PIPERAZINE | 1-5 % |
| 104-19-8 | | T R-22, 24, 34 | |
| N(3-DIMETHYLAMIN | OPROPYL)-1,3-PRC | | 1-5 % |
| 10563-29-8 | | C R-21/22, 34, 43 | |
| TRIETHYLENE GLY0 14970-87-7 | COL DIMERCAPATA | N Xn R-20/22 | 1-5 % |
| 14310-01-1 | | | |

The Full Text for all R-Phrases are Displayed in Section 16

3. HAZARDS IDENTIFICATION

Irritating to eyes and skin. May cause sensitisation by skin contact.

4. FIRST AID MEASURES

| INHALATION: | Move the exposed person to fresh air at once. Get medical attention if any discomfort continues. Perform artificial respiration if breathing has stopped. When breathing is difficult, properly trained personnel may assist affected person by administering 100% oxygen. Keep the affected person warm and at rest. Get prompt medical attention. |
|-------------|--|
| INGESTION: | DO NOT INDUCE VOMITING! NEVER MAKE AN UNCONSCIOUS PERSON VOMIT OR DRINK FLUIDS! Rinse mouth thoroughly. Promptly get affected personnel to drink large volumes of water to dilute the swallowed chemical. Get medical attention |

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 SKIN:
 Remove affected person from source of contamination. Promptly wash contaminated skin with soap or mild detergent and water. Promptly remove clothing if soaked through and wash as above. Get medical attention immediately.

 EYES:
 Promptly wash eyes with plenty of water while lifting the eye lids. Continue to rinse for at least 15 minutes. Get medical attention promptly if symptoms occur after washing.

5. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA:Use extinguishing media appropriate for surrounding fire.SPECIAL FIRE FIGHTING
PROCEDURES:Keep run-off water out of sewers and water sources. Dike for water control. Cool
containers exposed to flames with water until well after the fire is out. Move container
from fire area if it can be done without risk. If risk of water pollution occurs, notify
appropriate authorities.

6. ACCIDENTAL RELEASE MEASURES

| SPILL CLEAN UP METHODS: | Wear necessary protective equipment. Runoff or release to sewer, waterway or ground is forbidden. Absorb in vermiculite, dry sand or earth and place into containers. Flush area with plenty of water. Do not let washing down water contaminate ponds or waterways. |
|-------------------------|--|
| 7. HANDLING AND STOP | RAGE |
| USAGE PRECAUTIONS: | Avoid spilling, skin and eye contact. Ventilate well, avoid breathing vapours. Use approved respirator if air contamination is above accepted level. Persons susceptible for allergic reactions should not handle this product. |

STORAGE CRITERIA:

Chemical storage.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

PROTECTIVE EQUIPMENT:



| VENTILATION: | Provide adequate general and local exhaust ventilation. |
|--------------------------|--|
| RESPIRATORS: | No specific recommendation made, but respiratory protection must be used if the general level exceeds the Occupational Exposure Level (OEL). |
| PROTECTIVE GLOVES: | Use protective gloves. |
| EYE PROTECTION: | Wear approved safety goggles. |
| OTHER PROTECTION: | Wear appropriate clothing to prevent any possibility of liquid contact and repeated or prolonged vapour contact. Provide eyewash station. |
| HYGIENIC WORK PRACTICES: | DO NOT SMOKE IN WORK AREA! Wash 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. No eating or drinking while working with this material.

9. PHYSICAL AND CHEMICAL PROPERTIES

| APPEARANCE: | Viscous. Liquid. | |
|-------------------|------------------|---------|
| COLOUR: | Yellow. | |
| FLASH POINT (°C): | > 1 00 | Method: |

10. STABILITY AND REACTIVITY

| STABILITY: | Normally stable. |
|--------------------------------|--|
| CONDITIONS TO AVOID: | Avoid heat, flames and other sources of ignition. Avoid contact with strong oxidisers. |
| HAZARDOUS DECOMP. PRODUCTS: | Fire or high temperatures create: Carbon monoxide (CO). Carbon dioxide (CO2). |

11. TOXICOLOGICAL INFORMATION

| INHALATION: | Irritating to respiratory system. |
|-------------------------|--|
| INGESTION: | May cause discomfort if swallowed. |
| SKIN: | Irritating to skin. May cause sensitisation by skin contact. |
| EYES: | Irritating to eyes. |
| MEDICAL CONSIDERATIONS: | Skin disorders and allergies. |

12. ECOLOGICAL INFORMATION

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHODS: Dispose of in accordance with Local Authority requirements.

No.

14. TRANSPORT INFORMATION

ADR CLASS:

Not classified for transportation.

MARINE POLLUTANT:

15. REGULATORY INFORMATION

LABEL FOR SUPPLY:



| CONTAINS | N(3-DIMETHYLAMINOPROPYL)-1,3-PROPYLENEDIAMINE |
|-----------------|--|
| RISK PHRASES: | R-36/38 Irritating to eyes and skin. R-43 May cause sensitisation by skin contact. |
| SAFETY PHRASES: | S-2 Keep out of the reach of children. S-26 In case of contact with eyes, rinse immediately with plenty of water and seek medical advice. S-28B After contact with skin, wash immediately with plenty of soap and water S-36/37/39 Wear suitable protective clothing, gloves and eye/face protection. S-46 If swallowed, seek medical advice immediately and show this container or label. |

16. OTHER INFORMATION

| USER NOTES: | This product should be used as directed by Bostik Findley Ltd. For further information consult the product data sheet or contact Technical Services. |
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| REVISION DATE: | Dec 2002 |
| REV. No./REPL. SDS GENERATED: | 1 |
| DATE: | Dec 2002 |
| PRINTING DATE: | 2003-03-07 |
| R-PHRASES (Full Text): | R-20/22 Harmful by inhalation and if swallowed. R-22 Harmful if swallowed. R-24 Toxic in contact with skin. R-34 Causes burns. R-21/22 Harmful in contact with skin and if swallowed. R-43 May cause sensitisation by skin contact. |