REVISION DATE: September 2007 SDS NO.: 12758



# SAFETY DATA SHEET ARALDITE RAPID STEEL HARDENER

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

PRODUCT NAME ARALDITE RAPID STEEL HARDENER

PRODUCT NO. 80815

SUPPLIER BOSTIK LIMITED

COMMON ROAD STAFFORD STAFFORDSHIRE ST16 3EH

+44 1785 255141

+44 1785 272650 (24 HOUR)

sds.uk@bostik.com

#### **2 HAZARDS IDENTIFICATION**

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

CLASSIFICATION Xi;R36/38. R43.

# 3 COMPOSITION/INFORMATION ON INGREDIENTS

Name	EC No.	CAS-No.	Content	Classification
2,4,6-TRIS(DIMETHYLAMINOMETHYL)PHENOL	202-013-9	90-72-2	5-10%	Xn;R22 Xi;R36/38
BENZYL ALCOHOL	202-859-9	100-51-6	10-30%	Xn;R20/22
TRIETHYLENETETRAMINE	203-950-6	112-24-3	1-5%	C;R34 Xn;R21 R43 R52/53

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

# **4 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.

# **5 FIRE-FIGHTING MEASURES**

# EXTINGUISHING MEDIA

Use fire-extinguishing media appropriate for surrounding materials.

#### SPECIFIC HAZARDS

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

# PROTECTIVE MEASURES IN FIRE

Wear self contained breathing apparatus

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ARALDITE RAPID STEEL HARDENER

# **6 ACCIDENTAL RELEASE MEASURES**

PERSONAL PRECAUTIONS

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

**ENVIRONMENTAL PRECAUTIONS** 

Prevent entry into drains and water courses.

SPILL CLEAN UP METHODS

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

#### **7 HANDLING AND STORAGE**

#### **USAGE PRECAUTIONS**

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

STORAGE PRECAUTIONS

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

STORAGE CLASS

Chemical storage.

### 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

**INGREDIENT COMMENTS** 

WEL = Workplace Exposure Limits

PROTECTIVE EQUIPMENT





# **ENGINEERING MEASURES**

Provide adequate general and local exhaust ventilation.

#### 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 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.

# 9 PHYSICAL AND CHEMICAL PROPERTIES

**APPEARANCE** Paste **COLOUR** Beige. **ODOUR** Amine.

**SOLUBILITY** Practically insoluble in water

RELATIVE DENSITY VISCOSITY 200 Pas

# 10 STABILITY AND REACTIVITY

# **STABILITY**

Stable under normal temperature conditions.

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ARALDITE RAPID STEEL HARDENER

CONDITIONS TO AVOID

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

HAZARDOUS DECOMPOSITION 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 CONTACT

Irritating to skin. May cause sensitisation by skin contact.

**EYE CONTACT** 

Irritating to eyes.

MEDICAL CONSIDERATIONS

Skin disorders and allergies.

# 12 ECOLOGICAL INFORMATION

#### **ECOTOXICITY**

Contamination of the terrestrial and aquatic environments should be avoided

#### 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 Waste key number 070204

**DISPOSAL METHODS** 

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

#### 14 TRANSPORT INFORMATION

**GENERAL** The product is not covered by international regulation on the transport of dangerous goods (IMDG, IATA,

ADR/RID).

No transport warning sign required.

ADR LABEL NO. MARINE POLLUTANT No.

#### 15 REGULATORY INFORMATION

### **LABELLING**



**CONTAINS** TRIETHYLENETETRAMINE

**RISK PHRASES** 

R36/38 Irritating to eyes and skin.

R43 May cause sensitisation by skin contact.

SAFETY PHRASES

S2 Keep out of the reach of children

S24/25 Avoid contact with skin and eyes. **REVISION DATE: September 2007** 

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# ARALDITE RAPID STEEL HARDENER

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.

S46 If swallowed, seek medical advice immediately and show this container or label.

S56 Dispose of this material and its container to hazardous or special waste collection point.

S64 If swallowed, rinse mouth with water (only if the person is conscious).

#### STATUTORY INSTRUMENTS

Chemicals (Hazard Information and Packaging) Regulations. Control of Substances Hazardous to Health.

# APPROVED CODE OF PRACTICE

Classification and Labelling of Substances and Preparations Dangerous for Supply.

#### **GUIDANCE NOTES**

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

#### **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**

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 EC

REVISION DATE September 2007

REV. NO./REPL. SDS GENERATED 3

DATE Feb 2004

# RISK PHRASES IN FULL

R20/22 Harmful by inhalation and if swallowed.

R21 Harmful in contact with skin.
R22 Harmful if swallowed.

R34 Causes burns.

R36/38 Irritating to eyes and skin.

R43 May cause sensitisation by skin contact.

R52/53 Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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REVISION DATE: July 2009 SDS NO.: 12767



# SAFETY DATA SHEET ARALDITE RAPID STEEL RESIN

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

PRODUCT NAME ARALDITE RAPID STEEL RESIN

PRODUCT NO. 80815

SUPPLIER BOSTIK LIMITED

COMMON ROAD STAFFORD STAFFORDSHIRE ST16 3EH +44 1785 272625

+44 1785 272650 (24 HOUR)

sds.uk@bostik.com

#### **2 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.

CLASSIFICATION Xi;R36/38. R43. N;R51/53.

# 3 COMPOSITION/INFORMATION ON INGREDIENTS

Name	EC No.	CAS-No.	Content	Classification
BISPHENOL A -EPICHLOROHYDRIN EPOXY	500-033-5	25068-38-6	30-60%	Xi;R36/38. N;R51/53. R43.
RESIN (NUMBER AV MW<700)				
BISPHENOL F EPOXY RESIN		9003-36-5	10-30%	Xi;R36/38. N;R51/53. R43.
DIPENTAERYTHRITOL PENTAACRYLATE	262-270-8	60506-81-2	10-30%	Xi;R36.

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

# 4 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.

# 5 FIRE-FIGHTING MEASURES

EXTINGUISHING MEDIA

Use fire-extinguishing media appropriate for surrounding materials.

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.

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# ARALDITE RAPID STEEL RESIN

SPECIFIC HAZARDS

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

# **6 ACCIDENTAL RELEASE MEASURES**

PERSONAL PRECAUTIONS

Avoid skin and eye contact. Ensure adequate ventilation.

**ENVIRONMENTAL PRECAUTIONS** 

Prevent entry into drains and water courses.

SPILL CLEAN UP METHODS

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

#### **7 HANDLING AND STORAGE**

#### USAGE PRECAUTIONS

Avoid spilling, skin and eye contact. Persons susceptible for allergic reactions should not handle this product. Ventilate well, avoid

breathing vapours. Use approved respirator if air contamination is above accepted level.

STORAGE PRECAUTIONS

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

STORAGE CLASS

Chemical storage.

#### 8 EXPOSURE CONTROLS/PERSONAL PROTECTION

INGREDIENT COMMENTS

WEL = Workplace Exposure Limits

PROTECTIVE EQUIPMENT





# ENGINEERING MEASURES

Provide adequate general and local exhaust ventilation.

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 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.

#### 9 PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE Liquid

COLOUR Dark Grey

ODOUR Slight odour

SOLUBILITY Immiscible with water

 BOILING POINT (°C)
 >200
 RELATIVE DENSITY
 1.55

 VISCOSITY
 150 Pas 25
 FLASH POINT (°C)
 > 100

ARALDITE RAPID STEEL RESIN

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#### 10 STABILITY AND REACTIVITY

STABILITY

Stable under normal temperature conditions.

CONDITIONS TO AVOID

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

HAZARDOUS DECOMPOSITION 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 CONTACT

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

EYE CONTACT

Irritating to eyes.

MEDICAL CONSIDERATIONS

Skin disorders and allergies.

#### 12 ECOLOGICAL INFORMATION

#### **ECOTOXICITY**

UN NO. ROAD

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

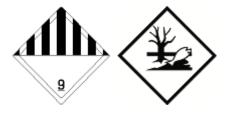
# 13 DISPOSAL CONSIDERATIONS

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 Waste key number 070208
DISPOSAL METHODS

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

# 14 TRANSPORT INFORMATION



UK ROAD CLASS 9

PROPER SHIPPING NAME ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (BISPHENOL A

-EPICHLOROHYDRIN EPOXY RESIN (NUMBER AV MW<700))
3082 UK ROAD PACK GR.

ADR CLASS NO. 9 ADR CLASS Class

ADR CLASS NO. 9 ADR CLASS Class 9: Miscellaneous dangerous substances and

articles.

 ADR PACK GROUP
 III
 TUNNEL RESTRICTION CODE
 (E)

 HAZARD No. (ADR)
 90
 ADR LABEL NO.
 9

 HAZCHEM CODE
 •3Z
 CEFIC TEC(R) NO.
 90GM6-III

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**ARALDITE RAPID STEEL RESIN** 

AIR PACK GR

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RID PACK GROUP RID CLASS NO. 9 Ш UN NO. SEA 3082 IMDG CLASS 9 IMDG PACK GR. Ш EMS F-A, S-F MFAG See Guide UN NO. AIR 3082

15 REGULATORY INFORMATION

LABELLING

AIR CLASS

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ritant Dangerous for

nvironment

CONTAINS BISPHENOL A -EPICHLOROHYDRIN EPOXY RESIN (NUMBER AV MW<700)

BISPHENOL F EPOXY RESIN

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

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.

S61 Avoid release to the environment. Refer to special instructions/safety data sheets.

P5 Contains epoxy constituents. See information supplied by the manufacturer.

STATUTORY INSTRUMENTS

Chemicals (Hazard Information and Packaging) Regulations. 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).

#### 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.

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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 Limited.

ISSUED BY

Approved LJ

REVISION DATE July 2009

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REVISION DATE: July 2009 SDS NO.: 12767

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ARALDITE RAPID STEEL RESIN

DATE February 2004

RISK PHRASES IN FULL

R36 Irritating to eyes.

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.