

Safety Data Sheet

4 Minute Steel Epoxy - Part A (resin); Part B (hardener)

Section 1. Identification

Product Identifier 4 Minute Steel Epoxy Part A (resin)

Synonyms 49402

Manufacturer Stock Numbers 144356

Recommended use Refer to Technical Information

Uses advised against Refer to Technical Information

Supplier Contact

Address

Engineering Adhesives & Lubricants (Aust) Pty Ltd
3/119 Olympic Circuit
Southport QLD 4215

Phone

(07) 5531-4242

Emergency Phone

13 1126

Fax

(07) 5531-4243

Poisons Information
Centre

Section 2. Hazards Identification

Classification

SENSITIZATION - SKIN - Category 1
SERIOUS EYE DAMAGE /EYE IRRITATION - Category 2A
SKIN CORROSION/IRRITATION - Category 2

Signal Word

Warning

Pictogram



Hazard Statements

Causes serious eye irritation
Causes skin irritation
May cause an allergic skin reaction

Precautionary Statements

Response	<p>If eye irritation persists: Get medical advice/attention.</p> <p>If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</p> <p>If on skin: Wash with plenty of soap and water</p> <p>If skin irritation occurs: Get medical advice/attention.</p> <p>If skin irritation or rash occurs: Get medical advice/attention.</p> <p>Read label before use.</p> <p>Take off contaminated clothing and wash it before reuse.</p> <p>Wash contaminated clothing before reuse.</p>
Prevention	<p>Avoid breathing dust/fume/gas/mist/ vapors/spray.</p> <p>Contaminated work clothing must not be allowed out of the workplace.</p> <p>Wash thoroughly after handling.</p> <p>Wear eye protection/face protection.</p> <p>Wear protective gloves.</p>
Storage	N/A
Disposal	Dispose of contents/containers in accordance with local regulations.

Ingredients of unknown toxicity 0%

Hazards not Otherwise Classified

Additional Information No information available

Section 3. Ingredients

CAS	Ingredient Name	Weight %
25085-99-8	Oxirane,2,2',1 methyl ethylidene bis 4,1 B	25% - 50%
68477-30-5	Distillates (petroleum), catalytic reformer fractionator residue, intermediate-boiling	1% - 3%
1333-86-4	Carbon Black	0.1% - 0.3%

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First-Aid Measures

First Aid Measures

General advice
Get medical advice/attention if you feel unwell.

Eye contact
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

Skin Contact
IF ON SKIN: Wash with plenty of soap and water. Take off contaminated clothing and wash before reuse. If skin irritation or rash occurs: Get medical

advice/attention.

Inhalation

IF INHALED: Call a POISON CENTER or doctor if you feel unwell.

Ingestion

Do NOT induce vomiting. IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

Symptoms: No information available.

Most important symptoms and effects, both acute and delayed

Indication of any immediate medical attention and special treatment needed Note to physicians: Treat symptomatically.

Section 5. Fire Fighting Measures

Suitable Extinguishing Media

Dry chemical, CO₂, water spray or alcohol-resistant foam.

Unsuitable Extinguishing Media

Strong water jet

Specific hazards arising from the chemical

Burning produces heavy smoke. Fire may produce irritating and/or toxic gases. In the event of fire and/or explosion do not breathe fumes. May cause sensitization by skin contact.

Special protective equipment for fire-fighters

Wear self-contained breathing apparatus and protective suit. Cool containers with flooding quantities of water until well after fire is out. Do not allow run-off from fire-fighting to enter drains or water courses.

Section 6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Personal precautions

Avoid breathing vapors or mists. Use personal protective equipment as required. Avoid contact with skin, eyes or clothing.

For emergency responders

Use personal protection recommended in Section 8.

Environmental precautions

Do not allow into any sewer, on the ground or into any body of water. If the product contaminates lakes, rivers or sewage, inform appropriate authorities in accordance with local regulations. Prevent further leakage or spillage if safe to do so. Local authorities should be advised if significant spillages cannot be contained.

Methods and material for containment and cleaning up

Methods for containment

Prevent further leakage or spillage if safe to do so.

Methods for cleaning up

Dispose of waste product or used containers according to local regulations. Clean with detergents. Avoid solvent cleaners. Dam up. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).

Pick up and transfer to properly labeled containers. Clean contaminated surface thoroughly. Take up mechanically, placing in appropriate containers for disposal.

Section 7. Handling and Storage

Precautions for safe handling

Advice on safe handling

Use personal protection recommended in Section 8. Never use pressure to empty container. Comply with the health and safety at work laws. Prevent product from entering drains. Use only with adequate ventilation. Do not breathe dust/fume/gas/mist/vapors/spray.

General Hygiene Considerations

When using do not eat, drink or smoke. Wash contaminated clothing before reuse. Avoid contact with skin, eyes or clothing.

Conditions for safe storage, including any incompatibilities

Storage Conditions

Keep/store only in original container. Store in accordance with local regulations. Keep unauthorized personnel away. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Keep container tightly closed in a dry and well-ventilated place.

Incompatible materials

Strong oxidizing agents. Strong acids. Acids. Aluminum

Section 8. Exposure Controls/Personal Protection

Occupational Exposure Limits

Ingredient Name	ACGIH TLV	OSHA PEL	STEL
Oxirane,2,2',1 methyl ethylidene bis 4,1 B	N/A	N/A	N/A
Distillates (petroleum), catalytic reformer fractionator residue, intermediate-boiling	N/A	N/A	N/A
Carbon Black	TWA: 3 mg/m ³ inhalable fraction	TWA: 3.5 mg/m ³	N/A

Personal Protective Equipment

Goggles, Gloves

Engineering Controls

Ensure adequate ventilation, especially in confined areas. Provide local exhaust ventilation. In case of insufficient ventilation, wear suitable respiratory equipment.

Individual protection measures, such as personal protective equipment

Eye/face protection

Tight sealing safety goggles.

Skin and body protection

Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact. Wear suitable protective clothing.

Hand Protection

There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals. Ensure that the breakthrough time of the glove material is not exceeded. Refer to glove supplier for information on breakthrough time for specific gloves. The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed. Gloves should be replaced regularly and if there is any sign of damage to the glove material. Always ensure that gloves are free from defects and that they are stored and used correctly. The performance or effectiveness of the glove may be reduced by physical / chemical damage and poor maintenance. Wear protective gloves.

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

Thermal Protection

No information available

Section 9. Physical and Chemical Properties

Physical State	Paste/Gel
Color	Grey
Odor	Slight
Odor Threshold	No information available
Solubility	No information available
Partition coefficient Water/n-octanol	No information available
VOC%	Nil
Viscosity	No information available
Specific Gravity	1.87
Density lbs/Gal	15.58
Pounds per Cubic Foot	N/A
Flash Point	94C 201F
FP Method	N/A
pH	No information available
Melting Point	No information available

Skin Contact
Causes skin irritation
May cause an allergic skin reaction

Ingestion
Not applicable

Inhalation
Not applicable

Carbon black (1333-86-4)
Oral LD50: >15400 mg/kg (Rat)
Dermal LD50: >3 g/kg (Rabbit)

Unknown Acute Toxicity
0% of the mixture consists of ingredient(s) of unknown toxicity.

Skin corrosion/irritation
Causes skin irritation

Serious eye damage/eye irritation
Causes serious eye irritation

Skin sensitization
May cause an allergic skin reaction

Respiratory sensitization
Not applicable

Germ cell mutagenicity
Not applicable

Carcinogenicity
Not applicable

Reproductive Toxicity
Not applicable

Specific target organ toxicity (single exposure)
Not applicable

Specific target organ toxicity (repeated exposure)
Not applicable

Aspiration hazard
Not applicable

According to IARC, Volume 93, no significant exposure to primary particles of carbon black is thought to occur from use in paints since the pigment is bound to other materials.

ACGIH: A3 - Animal carcinogen

IARC: Group 2B - Possibility carcinogenic to humans

OSHA: X - Present

Numerical measures of toxicity - Component Information

Numerical measures of toxicity - Product Information

Delayed and immediate effects as well as chronic effects from short and long-term

Carcinogenicity

Section 12. Ecological Information

Ecotoxicity	Environmental precautions Prevent product from entering drains.
	Marine pollutant This material meets the definition of a marine pollutant
Persistence and degradation	No information available.
Bioaccumulation	No information available.
Mobility	No information available.
Other adverse effects	No information available

Section 13. Disposal

Waste treatment methods	Disposal of wastes Disposal should be in accordance with applicable regional, national and local laws and regulations.
	Contaminated packaging Improper disposal or reuse of this container may be dangerous and illegal. Empty containers must be scrapped or reconditioned.

Section 14. Transport Information

UN Number	3082
UN Proper Shipping Name	Environmentally hazardous substances, liquid, n.o.s Epoxy Resin
Limited Quantity	ADG 7 specifies a Limited Quantity value of 5 kg for this class of product.
ADG Classification	Hazard Class: 9
Packing Group	III
Other hazard information	Environmental hazard Yes Marine pollutant This material meets the definition of a marine pollutant Marine pollutant Epoxy resin
Special Provisions	8, 146, 173, 335, IB3, T4, TP1, TP29 Emergency Response Guide Number 171
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	No information available

Section 15. Regulatory Information

Section 16. Other Information

Revision Date

11/09/2018

Disclaimer

The data contained herein is based upon information that Engineering Adhesives & Lubricants (Aust) Pty Ltd believes to be reliable. Users of this product have the responsibility to determine that suitability of use and to adopt all necessary precautions to ensure the safety and protection of property and persons involved in said use. All statements or suggestions are made without warranty, expressed or implied, regarding the accuracy of the information, the hazards connected with the use of the material or the results to be obtained from the use thereof.


Safety Data Sheet

4 Minute Steel Epoxy Part B (hardener)

Section 1. Identification

Product Identifier	4 Minute Steel Epoxy Part B (hardener)		
Synonyms	49402		
Manufacturer Stock Numbers	144356		
Recommended use	Refer to Technical Information		
Uses advised against	Refer to Technical Information		
Supplier Contact			
Address	Engineering Adhesives & Lubricants (Aust) Pty Ltd 3/119 Olympic Circuit Southport QLD 4215		
	Phone	Emergency Phone	Fax
	(07) 5531-4242	13 1126	(07) 5531-4243
		Poisons Information Centre	

Section 2. Hazards Identification

Classification	CARCINOGENICITY - Category 1A SENSITIZATION - SKIN - Category 1B SERIOUS EYE DAMAGE /EYE IRRITATION - Category 1 SKIN CORROSION/IRRITATION - Category 1B TOXIC TO REPRODUCTION - Category 2
Signal Word	Danger
Pictogram	
Hazard Statements	Causes serious eye damage Causes severe skin burns and eye damage

May cause an allergic skin reaction
 May cause cancer.
 Suspected of damaging fertility or the unborn child.

Precautionary Statements

Response

If exposed or concerned: Get medical advice/attention.
 If exposed or concerned: Get medical advice/attention.
 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
 If inhaled: Remove person to fresh air and keep comfortable for breathing.
 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower. Wash contaminated clothing before reuse. Immediately call a POISON CENTER or doctor/physician. If skin irritation or rash occurs: Get medical advice/attention.
 If on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower.
 If skin irritation or rash occurs: Get medical advice/attention.
 If swallowed: Rinse mouth. Do NOT induce vomiting.
 Read label before use.
 Wash contaminated clothing before reuse.

Prevention

Avoid breathing dust/fume/gas/mist/ vapors/spray.
 Contaminated work clothing must not be allowed out of the workplace.
 Do not handle until all safety precautions have been read and understood.
 Obtain special instructions before use.
 Wash face, hands and any exposed skin thoroughly after handling.
 Wear protective gloves/protective clothing/eye protection/face protection.

Storage

Store locked up.

Disposal

Dispose of contents/containers in accordance with local regulations.

Ingredients of unknown toxicity 0%

Hazards not Otherwise Classified

Additional Information No information available

Section 3. Ingredients

CAS	Ingredient Name	Weight %
Proprietary	Epoxy Curing Agent	1% - 3%
84852-15-3	4-Nonylphenol, mixed isomers	1% - 3%
14808-60-7	Crystalline silica, quartz	0.1% - 0.3%

Occupational exposure limits, if available, are listed in Section 8.

Section 4. First-Aid Measures

First Aid Measures

General advice

IF exposed or concerned: Get medical advice/attention.

Eye contact

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.

Skin Contact

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower. Wash contaminated clothing before reuse. Immediately call a POISON CENTER or doctor/physician. If skin irritation or rash occurs: Get medical advice/attention.

Inhalation

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

Ingestion

IF SWALLOWED: Rinse mouth. DO NOT induce vomiting.

Most Important Symptoms and Effects, Both Acute and Delayed

No information available.

Advice to Physician

Treat symptomatically.

Section 5. Fire Fighting Measures

Suitable Extinguishing Media

Dry chemical, CO2, water spray or alcohol-resistant foam.

Unsuitable Extinguishing Media

Strong water jet

Specific hazards arising from the chemical

Burning produces heavy smoke. Fire may produce irritating and/or toxic gases. In the event of fire and/or explosion do not breathe fumes. May cause sensitization by skin contact.

Special protective equipment for fire-fighters

Wear self-contained breathing apparatus and protective suit. Cool containers with flooding quantities of water until well after fire is out. Do not allow run-off from fire-fighting to enter drains or water courses.

Section 6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

Personal precautions

Avoid breathing vapors or mists. Use personal protective equipment as required. Avoid contact with skin, eyes or clothing. Evacuate personnel to safe areas. Keep people away from and upwind of spill/leak.

For emergency responders

Use personal protection recommended in Section 8.

Environmental precautions Do not allow into any sewer, on the ground or into any body of water. If the product contaminates lakes, rivers or sewage, inform appropriate authorities in accordance with local regulations. Prevent further leakage or spillage if safe to do so. Local authorities should be advised if significant spillages cannot be contained.

Methods and material for containment and cleaning up
Methods for containment
 Prevent further leakage or spillage if safe to do so.

Methods for cleaning up
 Dispose of waste product or used containers according to local regulations. Clean with detergents. Avoid solvent cleaners. Dam up. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Pick up and transfer to properly labeled containers. Clean contaminated surface thoroughly. Take up mechanically, placing in appropriate containers for disposal.

Section 7. Handling and Storage

Precautions for safe handling
Advice on safe handling
 Use personal protection recommended in Section 8. Never use pressure to empty container. Comply with the health and safety at work laws. Prevent product from entering drains. Use only with adequate ventilation. Do not breathe dust/fume/gas/mist/vapors/spray.

General Hygiene Considerations
 When using do not eat, drink or smoke. Wash contaminated clothing before reuse. Avoid contact with skin, eyes or clothing.

Conditions for safe storage, including any incompatibilities
Storage Conditions
 Keep/store only in original container. Store in accordance with local regulations. Keep unauthorized personnel away. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Keep container tightly closed in a dry and well-ventilated place.

Incompatible materials
 Strong oxidizing agents. Acids. Alkali.

Section 8. Exposure Controls/Personal Protection

Occupational Exposure Limits	Ingredient Name	ACGIH TLV	OSHA PEL	STEL
	Epoxy Curing Agent	Not Established	Not Established	N/A 4-
	Nonylphenol, mixed isomers	N/A	N/A	N/A
	Crystalline silica, quartz	0.1mg/m3	0.1 mg/m3	N/A

Personal Protective Equipment
 Goggles, Gloves

Engineering Controls
 Ensure adequate ventilation, especially in confined areas. Provide local exhaust ventilation. In case of insufficient ventilation, wear suitable respiratory equipment.

Individual protection measures, such as personal protective equipment

Eye/face protection
Tight sealing safety goggles. Face protection shield.

Skin and body protection
Wear impervious protective clothing, including boots, gloves, lab coat, apron or coveralls, as appropriate, to prevent skin contact. Wear suitable protective clothing.

Hand Protection
There is no one glove material or combination of materials that will give unlimited resistance to any individual or combination of chemicals. Ensure that the breakthrough time of the glove material is not exceeded. Refer to glove supplier for information on breakthrough time for specific gloves. The instructions and information provided by the glove manufacturer on use, storage, maintenance and replacement must be followed. Gloves should be replaced regularly and if there is any sign of damage to the glove material. Always ensure that gloves are free from defects and that they are stored and used correctly. The performance or effectiveness of the glove may be reduced by physical / chemical damage and poor maintenance. Wear protective gloves.

Respiratory protection
When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.

Thermal Protection
No information available

Section 9. Physical and Chemical Properties

Physical State	Paste/Gel
Color	Light yellow and slighty milky white
Odor	Slight
Odor Threshold	No information available
Solubility	No information available
Partition coefficient Water/n-octanol	No information available
VOC%	N/A
Viscosity	No information available
Specific Gravity	2.04
Density lbs/Gal	17.01

Pounds per Cubic Foot	N/A
Flash Point	94C 20F
FP Method	N/A
pH	No information available
Melting Point	No information available
Boiling Point	No information available
Boiling Range	N/A
LEL	N/A
UEL	N/A
Evaporation Rate	No information available
Flammability	No information available
Decomposition Temperature	No information available
Auto-ignition Temperature	No information available
Vapor Pressure	No information available
Vapor Density	No information available

Note The above information is not intended for use in preparing product specifications.

Section 10. Stability and Reactivity

Reactivity	No information available
Chemical stability	Stable under normal conditions.
Hazardous polymerization	None under normal processing.
Conditions to avoid	Heat, flames and sparks. Extremes of temperature and direct sunlight.
Incompatible materials	Strong oxidizing agents. Acids. Alkali.
Hazardous Decomposition Products	Carbon monoxide. Carbon dioxide (CO2). Oxides of sulfur.

Section 11. Toxicological Information

Information on likely routes of exposure

Eye contact
Causes serious eye damage

Skin Contact
Causes skin burns
May cause an allergic skin reaction

Ingestion
Not applicable

Inhalation
Not applicable

Delayed and immediate effects as well as chronic effects from short and long-term

Carcinogen
Quartz (14808-60-7)
ACGIH (American Conference of Governmental Industrial Hygienists)
A2 - Suspected Human Carcinogen.
IARC (International Agency for Research on Cancer)
Group 1 - Carcinogenic to Humans.
NTP (National Toxicology Program)
Known - Known Carcinogen.
OSHA (Occupational Safety and Health Administration of the US Department of Labor)
X - Present.

Skin corrosion/irritation
Causes skin burns

Serious eye damage/eye irritation
Causes serious eye damage

Skin sensitization
May cause an allergic skin reaction

Respiratory sensitization
Not applicable

Germ cell mutagenicity
Not applicable

Carcinogenicity
May cause cancer

Reproductive Toxicity
Suspected of damaging fertility or the unborn child

Specific target organ toxicity (single exposure)
Not applicable

Specific target organ toxicity (repeated exposure)

Not applicable

Aspiration hazard

Not applicable

Section 12. Ecological Information

Ecotoxicity	Environmental precautions Prevent product from entering drains.
Persistence and degradation	No information available.
Bioaccumulation	No information available.
Mobility	No information available.
Other adverse effects	No information available

Section 13. Disposal

Waste treatment methods	Disposal of wastes Disposal should be in accordance with applicable regional, national and local laws and regulations.
	Contaminated packaging Do not reuse container.

Section 14. Transport Information

UN Number	3267
UN Proper Shipping Name	Corrosive liquid, basic, organic, n.o.s 2,4,6-Tri(dimethylaminomethyl)phenol Phenol, 4-nonyl-, branched
Limited Quantity	ADG 7 specifies a Limited Quantity value of 1kg for this class of product.
ADG Classification	Hazard Class 8
Packing Group	II
Special Provisions	B2, IB2, T11, TP2, TP27 Emergency Response Guide Number 153
Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code	No information available
Other information	The supplier may apply one of the following exceptions: Combustible Liquid (49 CFR 173.150(f)); Consumer Commodity (49 CFR 173.150(c), ICAO/IATA SP A112); Limited Quantity (49 CFR 173.150(b), ICAO Part 3 Chapter 4, IATA 2.7, IMDG Chapter 3.4); Viscous Liquid (49 CFR 173.121(b), IMDG 2.3.2.2, IATA 3.3.3.1.1, ICAO 3.2.2, ADR 2.2.3.1.5); Does Not Sustain Combustion (49 CFR 173.120(a), IATA 3.3.1.3, ICAO 3.1.3, IMDG 2.3.1.3, ADR 2.2.3.1.1 Note 1); or others as allowed under hazardous materials/dangerous goods regulations.

Section 15. Regulatory Information

AICS

All of the significant ingredients in this formulation are compliant with NICNAS regulations.

Section 16. Other Information

Revision Date

19/09/2018

Disclaimer

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