



ADHESIVE ENGINEERING

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MATERIAL SAFETY DATA SHEET

Worksafe Hazard Assessment: Hazardous according to criteria of Worksafe Australia.

I IDENTIFICATION

Product Name: 139 GEL Part A

Other Names: L139

UN No: None

Hazchem Code: None

Dangerous Goods Class: None allocated.

Sub Risk Class: No Subsidiary Risk.

Packaging Group: None

EPG: .None

Poison Schedule: S5

Product Type: Part A of two part epoxy system

Chemical Family: Epoxy polymer in solvent system.

Uses: Used in various industrial and civil engineering applications.

Physical appearance & Properties:

Appearance & Odour: Clear liquid. Faint epoxy odour.

Melting/softening point: Liquid at normal temperatures.

Boiling point and vapour pressure: Decomposes.

Volatile materials: No data

Flashpoint: Not flammable

Specific gravity: No data.

Solubility in water: Insoluble.

Corrosiveness: Not corrosive

Ingredients:

Chemical entity	CAS No	Proportion %	Worksafe Exposure Limits	
			TWA mg/m ³	STEL mg/m ³
Epoxy polymer	secret	70-80	not set	not set
Benzyl alcohol	100-51-6	5	not set	not set
Bisphenol F epoxy resin	secret	5-10	not set	not set
Other non hazardous ingredients	secret	to 100	not set	not set

* Filler in this product does have TWA value. However, it is enclosed in a liquid product and the likelihood of it becoming airborne is very low. Note that when sanding cured product, face mask should be worn.

This is a commercial product, and the exact ratio of components may vary. Trace quantities of impurities are also likely.

II HEALTH HAZARD DATA

Health Effects:

No specific data is available for the product for chronic exposure symptoms. The materials in this product are not considered to be carcinogenic by the Worksafe Australia lists (May 1995). This material contains epoxy resins, classified by Worksafe Australia criteria as a sensitiser. Exposure to a sensitiser, once sensitisation has occurred, may manifest itself as a skin rash or inflammation or as an asthmatic condition, and in some individuals this reaction can be extremely severe.

MATERIAL SAFETY DATA SHEET

Acute Effects:

Small amounts swallowed incidental to normal handling operations are not likely to cause injury; swallowing amounts larger than that may cause injury.

Swallowed: Data suggests that the product should be considered as not harmful by ingestion.

Eye: Data suggests that this product should be classified as a moderate temporary eye irritant. However, permanent eye damage should not be expected.

Skin: Has caused allergic skin reactions in humans. Prolonged exposure not likely to cause significant skin damage. However, is a definite skin irritant. Single prolonged exposure not likely to result in material being absorbed through skin in harmful amounts.

Inhalation: Inhalation may cause irritation of the nose and throat and cause coughing and chest discomfort.

Primary route of exposure is inhalation and skin and eye contact.

LD₅₀ Oral (Rat) >2000mg/Kg

First Aid:

Swallowed: If swallowed, do NOT induce vomiting. Rinse mouth with water. Give a glass of water to drink. Contact a doctor or the Poisons Information Centre if symptoms of poisoning develop.

Eye: If this product comes into contact with eyes, hold eyes open and wash continuously for 15 minutes with running water. Ensure irrigation under eyelids by occasionally lifting eyelids. Do not attempt to remove contact lenses unless trained. Transport to hospital or doctor immediately.

Skin: If this product comes into contact with skin, wash skin with soap and water for 15 minutes. Remove contaminated clothing and footwear. Ensure contaminated clothing is thoroughly washed before using again. Transport to hospital or doctor immediately.

Inhalation: If fumes or combustion products are inhaled, remove to fresh air. Lay victim down & keep warm and rested. If breathing is shallow, or has stopped, ensure clear airway and apply resuscitation or oxygen if available. Transport to hospital or doctor immediately.

Eye wash stations or baths and deluge showers should be available where product is being used.

Advice to doctor: Treat symptomatically. Note that this product is classed as a sensitiser.

III PRECAUTIONS FOR USE

Risk Phrases are: R43. Combination Risk Phrases are: R36/38.

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

Exposure Standards:

A time weighted average (TWA) concentration for an 8 hour day, and 5 day week has not been established by Worksafe Australia for any of the ingredients in this product. There is a blanket limit of 10mg/m³ for dusts or mists when limits have not otherwise been established. The nature of this product makes it unlikely that this level will be approached in normal use. See ingredients section on page 1 of this data sheet.

Engineering Controls:

Ventilation must be adequate to ensure that the working environment is below the TWA value. Otherwise, use respiratory protection. Some materials should only be used when respiratory protection is being worn. For information on respiratory protection, consult AS1716. See below for further information.

Personal Protection:

Respiratory Protection: A face mask or respirator should be used when product is being used. For help in selecting suitable equipment consult AS/NZS 1715.

Protective Gloves: Rubber, PVC or other protective gloves should be worn when product is being used. For help in selecting suitable gloves consult AS 2161.

Eye Protection: Eye protective measures should be worn when product is being used. Consult AS 1336 and AS/NZS 1337 for information about eye protection.

Clothing: Clean overalls should be worn, preferably with an apron. Consult AS 2919 for advice on Industrial Clothing.

Safety Boots: Wearing safety boots is advisory. Consult AS/NZS 2210 for advice on Occupational Protective Footwear.

Flammability Limits: No data

Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.

IV SAFE HANDLING INFORMATION

Combination Safety Phrases are: S24/25. Avoid contact with skin and eyes.

Storage & Transport:

Being a scheduled poison, the product must be stored, maintained and used in accord with relevant state poisons act. No special transport requirements. This product does not have a UN classification.

Containers should be kept closed in order to minimise contamination. Keep from extreme heat and open flames, and make sure the material does not come into contact with water or acids.

Spills and disposals:

In event of a major spill, alert fire brigade and advise of nature & location of spill. Wear protective clothing. Prevent spillage from entering drains or water courses. Stop leak if safe to do so, and contain spill. Absorb onto vermiculite, sand, sawdust or other absorbent material. Sweep up and shovel or collect recoverable product into labelled containers for recycling or salvage. Recycle containers wherever possible. After spills, wash area, preventing runoff from entering drains. If material enters drains, advise emergency services. This material may be suitable for approved incineration or landfill. Dispose of only in compliance with local, state and federal regulations. Launder all contaminated clothing before re-use.

Fire/Explosion Hazard:

There is no explosion hazard from this material under normal circumstances.

Flashpoint: Not flammable

Extinguishing Media: Carbon dioxide, dry chemical or foam.

Special Fire fighting procedures: None.

Unusual fire & Explosion hazards: None.

Stability: Stable.

Polymerisation: Will not polymerise. However, reacts with amines to form polymer.

Decomposition Products: Carbon dioxide, carbon monoxide, water.

Materials to avoid: Strong acids, strong alkalis, amines, strong oxidising agents.

V OTHER INFORMATION

This MSDS is prepared in accord with the Worksafe Australia document "National Code of Practice for the Preparation of Material Safety Data Sheets", 2003.

Emergency Contact Points:

Adhesive Engineering NSW (John Skinner)	Dial	(02)9477 7877
		(After hours call (0407 510 503)
Police and Fire Brigade:	Dial	000
If ineffective:	Dial	1100 (Exchange)
For 24 hour emergency response:	Dial	0407 510 503

THIS MSDS SUMMARISES OUR BEST KNOWLEDGE OF THE HEALTH AND SAFETY HAZARD INFORMATION OF THE PRODUCT AND HOW TO SAFELY HANDLE AND USE THE PRODUCT IN THE WORKPLACE. EACH USER SHOULD READ THIS MSDS AND CONSIDER THE INFORMATION IN THE CONTEXT OF HOW THE PRODUCT WILL BE HANDLED AND USED IN THE WORKPLACE INCLUDING IN CONJUNCTION WITH OTHER PRODUCTS. IF CLARIFICATION OR FURTHER INFORMATION IS NEEDED TO ENSURE THAT AN APPROPRIATE RISK ASSESSMENT CAN BE MADE, THE USER SHOULD CONTACT THIS COMPANY. THE RESPONSIBILITY FOR PRODUCTS SOLD IS SUBJECT TO OUR STANDARD TERMS AND CONDITIONS, A COPY OF WHICH IS SENT TO OUR CUSTOMERS AND IS ALSO AVAILABLE ON REQUEST.

Please read all labels carefully before using product.

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MATERIAL SAFETY DATA SHEET

Worksafe Hazard Assessment: Hazardous according to criteria of Worksafe Australia.

IDENTIFICATION

Product Name: 139 GEL Part B
Other Names: L139 Correct Shipping name is "CORROSIVE LIQUID, N.O.S.*".
UN No: 1760 Hazchem Code: 2R
Dangerous Goods Class: 8 : Corrosive Substances.
Sub Risk Class: No Subsidiary Risk.
Packaging Group: III EPG: 8A1
Most EPGs may now be substituted by the "Initial Emergency Response Guide" available from Standards Australia.
Poison Schedule: S5
Product Type: Part B of two part epoxy system.
Chemical Family: Mix of amine (Isophorone diamine), cresylic acid and other ingredients.
Uses: Used in various industrial and civil engineering applications.

Physical appearance & Properties:

Appearance & Odour: Clear pale amber liquid. Characteristic mild amine odour.
Melting/softening point: No fixed melting point.
Boiling point and vapour pressure: Decomposes.
Volatile materials: No data. Expected to be low at 100°C
Flashpoint: Not flammable.
Specific gravity: No data.
Solubility in water: Soluble.
Corrosiveness: Corrosive to human tissues and some metals.

Ingredients:

Chemical entity	CAS No	Proportion %	Worksafe Exposure Limits	
			TWA mg/m ³	STEL mg/m ³
Isophorone diamine	2855-13-2	50	not set	not set
Cresylic acid	1319-77-3	5-10	22	not set
Other non hazardous ingredients	secret	to 100	not set	not set

This is a commercial product, and the exact ratio of components may vary. Trace quantities of impurities are also likely.

HEALTH HAZARD DATA

Health Effects:

No specific data is available for the product for chronic exposure symptoms. The materials in this product are not considered to be carcinogenic by the Worksafe Australia lists (May 1995). This material contains Isophorone diamine, classified by Worksafe Australia criteria as a sensitiser. Exposure to a sensitiser, once sensitisation has occurred, may manifest itself as a skin rash or inflammation or as an asthmatic condition, and in some individuals this reaction can be extremely severe.

MATERIAL SAFETY DATA SHEET

Acute Effects:

Swallowed: Data suggests that the product should be considered to be harmful by ingestion.

Eye: Data suggests that this product should be classified as corrosive to the eyes. Will cause problems such as corneal damage and or blindness if contact is not treated immediately.

Skin: Data suggests that the product should be classified as corrosive to the skin. May cause skin corrosion and burning if contacted areas are not treated promptly. Treatment should include neutralising the product. It is also harmful in contact with skin, and extensive contact may result in poisoning.

Inhalation: Data suggests that the product should be considered to be possibly irritating by inhalation. Inhalation may result in irritating of upper respiratory tract.

Primary route of exposure is inhalation and skin and eye contact.

First Aid:

If poisoning occurs, contact a Doctor or Poisons Information Centre quickly.

If swallowed, do not induce vomiting. Give a glass of water and seek urgent medical advice.

Eye: If this product comes into contact with eyes, hold open and wash with running water for at least 15 minutes. Ensure irrigation under eyelids by occasionally lifting them. Do not try to remove contact lenses unless trained.

Skin: If this product comes into contact with skin, wash skin for at least 15 minutes with soap and water. Remove contaminated clothing and footwear. Ensure contaminated clothing is thoroughly washed before using again.

Inhalation: If mists, dusts or combustion products are inhaled, remove to fresh air. Lay victim down & keep warm and rested.

If breathing is shallow, or has stopped, ensure clear airway and apply resuscitation or oxygen if available. Transport to hospital or doctor immediately.

Eye wash stations or baths and deluge showers should be available where product is being used.

Advice to doctor: Treat symptomatically. Note that this product is classed as a sensitiser.

III PRECAUTIONS FOR USE

Risk Phrases are: R34, R43. Combination Risk Phrases are: R21/22.

Causes burns. May cause sensitisation by skin contact. Harmful in contact with skin and if swallowed.

Exposure Standards:

A TWA value of 22 but no STEL value has been established for a significant ingredient in this product. Values expressed as mg/m³. Exposure values at the STEL (Short Term Exposure Limit) is an exposure value that should not be exceeded for more than 15 minutes and should not be repeated for more than 4 times per day. There should be at least 60 minutes between successive exposures at the STEL. Exposure values at the TWA (Time Weighted Average) means the average airborne concentration of a particular substance when calculated over a normal 8 hour working day for a 5 day working week. See ingredients section on page 1 of this data sheet.

Engineering Controls:

In industrial situations, concentration values below the TWA value should be maintained. Values may be reduced by process modification, use of local exhaust ventilation, capturing substances at the source, or other methods. If you believe air borne concentrations of mists, dusts or vapours are high, you are advised to modify the process or environment to reduce the problem.

Personal Protection:

Respiratory Protection: A face mask or respirator should be used when this material is being used. For help in selecting suitable equipment consult AS/NZS 1715.

Protective Gloves: Rubber, PVC or other protective gloves must be used, even if product is being used infrequently or for brief periods. Failure to use gloves may result in severe burns to the skin. For help in selecting suitable gloves consult AS 2161.

Eye Protection: Safety glasses, goggles or full face shield must be used when using this product. Even brief contact with eyes may result in pain and damage. Consult AS 1336 and AS/NZS 1337 for information about eye protection.

Clothing: Clean overalls should be worn, preferably with an apron. Consult AS 2919 for advice on Industrial Clothing.

Safety Boots: Wearing safety boots is advisory. Consult AS/NZS 2210 for advice on Occupational Protective Footwear.

Flammability Limits: Not flammable.

Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storing or re-using.

MATERIAL SAFETY DATA SHEET

IV SAFE HANDLING INFORMATION

Safety Phrases are: S26. Combination Safety Phrases are: S36/37/39.

In case of contact with eyes, rinse immediately with plenty of water and contact a doctor or Poisons Information Centre. Wear suitable protective clothing, gloves and eye/face protection.

Storage & Transport:

This material is classed as UN 1760, Class 8 : Corrosive Substances. Not to be transported with Classes 1 (Explosives), 4.3 (Dangerous When Wet Substances), 5.1 (Oxidising Agents), 5.2 (Organic Peroxides), 6 (Poisonous Toxic Substances) (nb when Class 6 is a cyanide and Class 8 an acid), 7 (Radioactive Substances), foodstuff and foodstuff empties.

This material is classed as a S5 Poison. Observe appropriate state regulations for storage, transport and sale. Containers should be kept closed in order to minimise contamination. Keep from extreme heat and open flames, and make sure the material does not come into contact with products listed under "Materials to avoid" below.

Spills and disposals:

In event of a major spill, prevent spillage from entering drains or water courses. Wear full protective clothing including face mask, face shield and gauntlets. Stop leak if safe to do so, and contain spill. Absorb onto vermiculite or other absorbent material. Sweep up and shovel or collect recoverable product into labelled containers for recycling or salvage. Recycle containers wherever possible. After spills, wash area, preventing runoff from entering drains. If material enters drains, advise emergency services. This material may be suitable for approved landfill. Dispose of only in compliance with local, state and federal regulations. Launder all contaminated clothing before re-use.

Fire/Explosion Hazard:

There is no explosion hazard from this material under normal circumstances.

Flashpoint: Not flammable.

Extinguishing Media: carbon dioxide, dry chemical, foam, water fog.

Special Fire fighting procedures: Wear full protective clothing including face mask, face shield and gauntlets.

Unusual fire & Explosion hazards: Decomposition products are toxic and corrosive. There is little or no risk of an explosion from this product if involved in a fire.

Stability: Stable.

Polymerisation: Will not polymerise. However, will react with epoxies to form a polymer.

Decomposition Products: carbon dioxide, carbon monoxide and smoke (if combustion is incomplete), nitrogen oxides, water.

Materials to avoid: strong acids, strong bases, strong oxidising agents.

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