



SAFETY DATA SHEET TAMREZ 320 PART B

According to Preparation of Safety Data Sheets for Hazardous Chemicals Code of Practice, February 2016

SECTION 1: Identification: Product identifier and chemical identity

Product identifier

Product name TAMREZ 320 PART B

Product No. 61 - 100167168

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

Application Two-component, epoxy-based adhesive.

Details of the supplier of the safety data sheet

Supplier Normet Asia-Pacific Pty Ltd
10 Ashwin Parade
Torrensville,
SA 5031
Australia
+61 (0)8 8152 7700
+61 (0)8 8152 0667
SDS@NORMET.COM

Emergency telephone number

Emergency telephone 1-800-557346 (24 HOURS)

SECTION 2: Hazard(s) identification

Classification of the substance or mixture

Physical hazards Not Classified

Health hazards Skin Corr. 1B - H314 Eye Dam. 1 - H318 Skin Sens. 1 - H317

Environmental hazards Not Classified

Label elements

Hazard pictograms



Signal word DANGER

Hazard statements H314 Causes severe skin burns and eye damage.
H317 May cause an allergic skin reaction.

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Precautionary statements	<p>P260 Do not breathe vapour/ spray.</p> <p>P261 Avoid breathing vapour/ spray.</p> <p>P264 Wash contaminated skin thoroughly after handling.</p> <p>P272 Contaminated work clothing should not be allowed out of the workplace.</p> <p>P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.</p> <p>P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.</p> <p>P302+P352 IF ON SKIN: Wash with plenty of soap and water.</p> <p>P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower.</p> <p>P304+P340 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.</p> <p>P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.</p> <p>P310 Immediately call a POISON CENTER or doctor/ physician.</p> <p>P321 Specific treatment (see medical advice on this label).</p> <p>P333+P313 If skin irritation or rash occurs: Get medical advice/ attention.</p> <p>P362+P364 Take off contaminated clothing and wash before reuse.</p> <p>P363 Wash contaminated clothing before reuse.</p> <p>P405 Store locked up.</p> <p>P501 Dispose of contents/ container in accordance with national regulations.</p>
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Contains 3-aminomethyl-3,5,5-trimethylcyclohexylamine, 3,6-diazaoctanethylenediamin

Other hazards

HSNO Classification

SECTION 3: Composition and information on ingredients

Mixtures

Solvent naphtha (petroleum), heavy arom.	1-5%
CAS number: 64742-94-5	
Classification	
Asp. Tox. 1 - H304	
3-aminomethyl-3,5,5-trimethylcyclohexylamine	1-5%
CAS number: 2855-13-2	
Classification	
Acute Tox. 4 - H302	
Acute Tox. 4 - H312	
Skin Corr. 1B - H314	
Eye Dam. 1 - H318	
Skin Sens. 1 - H317	
Aquatic Chronic 3 - H412	

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3,6-diazaoctanethylenediamin	1-5%
CAS number: 112-24-3	
Classification	
Acute Tox. 4 - H312	
Skin Corr. 1B - H314	
Eye Dam. 1 - H318	
Skin Sens. 1 - H317	
Aquatic Chronic 3 - H412	

The full text for all hazard statements is displayed in Section 16.

SECTION 4: First aid measures

Description of first aid measures

General information	Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Get medical attention. Treat symptomatically.
Inhalation	IF INHALED: Get medical attention immediately. Move affected person to fresh air and keep warm and at rest in a position comfortable for breathing. Do not induce vomiting.
Ingestion	IF SWALLOWED: Get medical attention immediately. If throat irritation or coughing persists, proceed as follows. Rinse mouth thoroughly with water. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs. Do not induce vomiting unless under the direction of medical personnel.
Skin Contact	IF ON SKIN (or hair): Rinse immediately with plenty of water. Continue to rinse for at least 10 minutes. Get medical attention if irritation persists after washing. Remove contaminated clothing.
Eye contact	IF IN EYES: Remove any contact lenses and open eyelids wide apart. Continue to rinse for at least 15 minutes and get medical attention. Get medical attention if irritation persists after washing.
Protection of first aiders	First aid personnel should wear appropriate protective equipment during any rescue.

Most important symptoms and effects, both acute and delayed

General information	Treat symptomatically. See Section 11 for additional information on health hazards.
Inhalation	Inhalation of vapour or mist may cause lung oedema. Development of symptoms may be delayed for 24 to 48 hours.
Ingestion	May cause stomach pain or vomiting. May cause irritation. Gastrointestinal symptoms, including upset stomach.
Skin contact	May cause skin irritation.
Eye contact	Causes skin and eye irritation.

Indication of any immediate medical attention and special treatment needed

Notes for the doctor	Treat symptomatically.
Specific treatments	Treat symptomatically.

SECTION 5: Firefighting measures

Extinguishing media

Suitable extinguishing media	Use fire-extinguishing media suitable for the surrounding fire. Extinguish with alcohol-resistant foam, carbon dioxide or dry powder.
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Unsuitable extinguishing media Do not use water, if avoidable.

Special hazards arising from the substance or mixture

Specific hazards The product is not flammable. Irritating gases or vapours.

Hazardous combustion products Harmful gases or vapours. Acrid smoke or fumes.

Advice for firefighters

Protective actions during firefighting No action shall be taken without appropriate training or involving any personal risk. Stop leak if safe to do so. If leakage cannot be stopped, evacuate area. Move containers from fire area if it can be done without risk.

Special protective equipment for firefighters Use air-supplied respirator, gloves and protective goggles.

Hazchem Code 2X

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions No action shall be taken without appropriate training or involving any personal risk. Keep unnecessary and unprotected personnel away from the spillage. Avoid contact with skin, eyes and clothing. Avoid inhalation of vapours. Follow precautions for safe handling described in this safety data sheet.

For non-emergency personnel No action shall be taken involving any personal risk or without suitable training. Evaluate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Avoid breathing vapour or mist. Provide adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Put on appropriate personal protective equipment.

Environmental precautions

Environmental precautions Spillages or uncontrolled discharges into watercourses must be reported immediately to the Environmental Agency or other appropriate regulatory body.

Methods and material for containment and cleaning up

Methods for cleaning up If leakage cannot be stopped, evacuate area. Move containers from spillage area. Large Spillages: Absorb spillage with sand or other inert absorbent. Collect and place in suitable waste disposal containers and seal securely. Small Spillages: Absorb small quantities with paper towels and evaporate in a safe place. Residues and empty containers should be taken care of as hazardous waste according to local and national provisions. Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority.

Reference to other sections

Reference to other sections For personal protection, see Section 8. For waste disposal, see Section 13. See Section 11 for additional information on health hazards. See Section 12 for additional information on ecological hazards.

SECTION 7: Handling and storage, including how the chemical may be safely used

Precautions for safe handling

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Usage precautions	For professional users only. Do not handle until all safety precautions have been read and understood. Use only in well-ventilated areas. Protect from moisture. Keep container dry. Container must be kept tightly closed when not in use. Do not eat, drink or smoke when using this product.
Advice on general occupational hygiene	Do not eat, drink or smoke when using this product. Provide eyewash station. Wash promptly with soap and water if skin becomes contaminated. Promptly remove any clothing that becomes contaminated.

Conditions for safe storage, including any incompatibilities

Storage precautions	Store at temperatures between 10°C and 38°C. Store in tightly-closed, original container in a dry, cool and well-ventilated place. Do not store near heat sources or expose to high temperatures. Store away from the following materials: Acids. Alkalis.
Storage class	Chemical storage.
Specific end use(s)	
Specific end use(s)	The identified uses for this product are detailed in Section 1.

SECTION 8: Exposure controls and personal protection

Exposure controls

Protective equipment



Appropriate engineering controls	This product is not to be used under conditions of poor ventilation. In case of insufficient ventilation, wear suitable respiratory equipment.
Personal protection	Use protective clothing, hand gloves and goggles.
Eye/face protection	Use safety glasses with side shields that are consistent with EN 166, or local equivalent, are recommended.
Hand protection	To protect hands from chemicals, gloves should comply with Australia/New Zealand Standard AS/NZS 2161. It is recommended that gloves are made of the following material: Nitrile rubber. Butyl rubber.
Other skin and body protection	Wear appropriate clothing to prevent skin contamination.
Hygiene measures	Wash hands thoroughly after handling. Promptly remove any clothing that becomes contaminated. Do not eat, drink or smoke when using this product.
Respiratory protection	Combination filter, type A2/P3.
Environmental exposure controls	Keep container tightly sealed when not in use. Residues and empty containers should be taken care of as hazardous waste according to local and national provisions.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

Appearance	Liquid.
Colour	Light brown.
Odour	Amine.
Odour threshold	Not determined.

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pH	Not determined.
Melting point	Not applicable.
Initial boiling point and range	Not determined.
Flash point	Not determined.
Evaporation rate	Not determined.
Evaporation factor	Not determined.
Flammability (solid, gas)	Not applicable.
Flammability Limit - Lower(%)	Not applicable.
Other flammability	Not applicable.
Vapour pressure	Not determined.
Vapour density	Not determined.
Relative density	Not determined.
Bulk density	Not applicable.
Solubility(ies)	Not determined.
Auto-ignition temperature	Not determined.
Decomposition Temperature	Not determined.
Viscosity	Not determined.
Explosive properties	Not applicable.
Explosive under the influence of a flame	Not considered to be explosive.
Oxidising properties	Not applicable.

SECTION 10: Stability and reactivity

Reactivity	Epoxides. ALWAYS add material to water, NEVER add water to the material
Stability	Stable at normal ambient temperatures and when used as recommended.
Possibility of hazardous reactions	Always dilute by carefully pouring the product into water.
Conditions to avoid	Avoid exposure to high temperatures or direct sunlight.
Materials to avoid	Acid anhydrides. Acids. Oxidising materials. Inorganic halides. Isocyanates. Peroxides. Phenols, cresols. Aluminium.
Hazardous decomposition products	None at ambient temperatures. Ammonia or amines.

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity - oral

Notes (oral LD₅₀) Based on available data the classification criteria are not met.

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ATE oral (mg/kg)	10,020.04
<u>Acute toxicity - dermal</u>	
Notes (dermal LD₅₀)	Based on available data the classification criteria are not met.
ATE dermal (mg/kg)	13,784.46
<u>Acute toxicity - inhalation</u>	
Notes (inhalation LC₅₀)	Based on available data the classification criteria are not met.
<u>Skin corrosion/irritation</u>	
Skin corrosion/irritation	Causes skin irritation.
<u>Serious eye damage/irritation</u>	
Serious eye damage/irritation	Causes serious eye irritation.
<u>Respiratory sensitisation</u>	
Respiratory sensitisation	Based on available data the classification criteria are not met.
<u>Skin sensitisation</u>	
Skin sensitisation	May cause an allergic skin reaction.
<u>Germ cell mutagenicity</u>	
Summary	Based on available data the classification criteria are not met.
<u>Carcinogenicity</u>	
Carcinogenicity	Based on available data the classification criteria are not met.
<u>Reproductive toxicity</u>	
Summary	Based on available data the classification criteria are not met.
<u>Specific target organ toxicity - single exposure</u>	
STOT - single exposure	Based on available data the classification criteria are not met.
<u>Specific target organ toxicity - repeated exposure</u>	
STOT - repeated exposure	Based on available data the classification criteria are not met.
<u>Aspiration hazard</u>	
Aspiration hazard	Based on available data the classification criteria are not met.

Toxicological information on ingredients.

Solvent naphtha (petroleum), heavy arom.

<u>Acute toxicity - oral</u>	
Notes (oral LD₅₀)	No specific test data are available.
<u>Acute toxicity - dermal</u>	
Notes (dermal LD₅₀)	No specific test data are available.
<u>Acute toxicity - inhalation</u>	
Notes (inhalation LC₅₀)	No specific test data are available.
<u>Skin corrosion/irritation</u>	
Skin corrosion/irritation	Based on available data the classification criteria are not met.
<u>Serious eye damage/irritation</u>	
Serious eye damage/irritation	Based on available data the classification criteria are not met.

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Respiratory sensitisation

Respiratory sensitisation Based on available data the classification criteria are not met.

Skin sensitisation

Skin sensitisation Based on available data the classification criteria are not met.

Germ cell mutagenicity

Summary Based on available data the classification criteria are not met.

Carcinogenicity

Carcinogenicity Based on available data the classification criteria are not met.

Reproductive toxicity

Summary Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure

STOT - single exposure Based on available data the classification criteria are not met.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure Based on available data the classification criteria are not met.

Aspiration hazard

Aspiration hazard May be fatal if swallowed and enters airways.

3-aminomethyl-3,5,5-trimethylcyclohexylamine

Acute toxicity - oral

Notes (oral LD₅₀) Harmful if swallowed.

ATE oral (mg/kg) 500.0

Acute toxicity - dermal

Notes (dermal LD₅₀) Harmful in contact with skin.

ATE dermal (mg/kg) 1,100.0

Acute toxicity - inhalation

Notes (inhalation LC₅₀) No specific test data are available.

Skin corrosion/irritation

Skin corrosion/irritation Causes severe burns.

Serious eye damage/irritation

Serious eye damage/irritation Based on available data the classification criteria are not met.

Respiratory sensitisation

Respiratory sensitisation Based on available data the classification criteria are not met.

Skin sensitisation

Skin sensitisation May cause an allergic skin reaction.

Germ cell mutagenicity

Summary Based on available data the classification criteria are not met.

Carcinogenicity

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Carcinogenicity Based on available data the classification criteria are not met.

Reproductive toxicity

Summary Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure

STOT - single exposure Based on available data the classification criteria are not met.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure Based on available data the classification criteria are not met.

Aspiration hazard

Aspiration hazard Based on available data the classification criteria are not met.

3,6-diazaoctanethylenediamin

Acute toxicity - oral

Notes (oral LD₅₀) No specific test data are available.

Acute toxicity - dermal

Notes (dermal LD₅₀) Harmful in contact with skin.

ATE dermal (mg/kg) 1,100.0

Acute toxicity - inhalation

Notes (inhalation LC₅₀) No specific test data are available.

Skin corrosion/irritation

Skin corrosion/irritation Causes severe burns.

Serious eye damage/irritation

Serious eye damage/irritation Based on available data the classification criteria are not met.

Respiratory sensitisation

Respiratory sensitisation Based on available data the classification criteria are not met.

Skin sensitisation

Skin sensitisation May cause an allergic skin reaction.

Germ cell mutagenicity

Summary Based on available data the classification criteria are not met.

Carcinogenicity

Carcinogenicity Based on available data the classification criteria are not met.

Reproductive toxicity

Summary Based on available data the classification criteria are not met.

Specific target organ toxicity - single exposure

STOT - single exposure Based on available data the classification criteria are not met.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure Based on available data the classification criteria are not met.

Aspiration hazard

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Aspiration hazard

Based on available data the classification criteria are not met.

SECTION 12: Ecological information

Ecotoxicity

Harmful to aquatic life with long lasting effects.

Ecological information on ingredients.

Solvent naphtha (petroleum), heavy arom.

Ecotoxicity

Not regarded as dangerous for the environment. However, large or frequent spills may have hazardous effects on the environment.

3-aminomethyl-3,5,5-trimethylcyclohexylamine

Ecotoxicity

Harmful to aquatic life with long lasting effects.

3,6-diazaoctanethylenediamin

Ecotoxicity

Harmful to aquatic life with long lasting effects.

Toxicity

Based on available data the classification criteria are not met.

Acute aquatic toxicity

Acute toxicity - fish

No specific test data are available.

Acute toxicity - aquatic invertebrates

No specific test data are available.

Acute toxicity - aquatic plants

No specific test data are available.

Ecological information on ingredients.

Solvent naphtha (petroleum), heavy arom.

Toxicity

Based on available data the classification criteria are not met.

Acute aquatic toxicity

Acute toxicity - fish

No specific test data are available.

Acute toxicity - aquatic invertebrates

No specific test data are available.

Acute toxicity - aquatic plants

No specific test data are available.

3-aminomethyl-3,5,5-trimethylcyclohexylamine

Acute aquatic toxicity

Acute toxicity - fish

No specific test data are available.

Acute toxicity - aquatic invertebrates

No specific test data are available.

Acute toxicity - aquatic plants

No specific test data are available.

3,6-diazaoctanethylenediamin

Toxicity

Based on available data the classification criteria are not met.

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Acute aquatic toxicity

Acute toxicity - fish No specific test data are available.

Acute toxicity - aquatic invertebrates No specific test data are available.

Acute toxicity - aquatic plants No specific test data are available.

Persistence and degradability

Persistence and degradability No information available.

Ecological information on ingredients.

Solvent naphtha (petroleum), heavy arom.

Persistence and degradability No information available.

3-aminomethyl-3,5,5-trimethylcyclohexylamine

Persistence and degradability No information available.

3,6-diazaoctanethylenediamin

Persistence and degradability No information available.

Bioaccumulative potential

Bioaccumulative Potential No information available.

Ecological information on ingredients.

Solvent naphtha (petroleum), heavy arom.

Bioaccumulative Potential No information available.

3-aminomethyl-3,5,5-trimethylcyclohexylamine

Bioaccumulative Potential No information available.

3,6-diazaoctanethylenediamin

Bioaccumulative Potential No information available.

Mobility in soil

Mobility No information available.

Ecological information on ingredients.

Solvent naphtha (petroleum), heavy arom.

Mobility No information available.

3-aminomethyl-3,5,5-trimethylcyclohexylamine

Mobility No information available.

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3,6-diazaoctanethylenediamin

Mobility No information available.

Other adverse effects

Other adverse effects None known.

Ecological information on ingredients.

Solvent naphtha (petroleum), heavy arom.

Other adverse effects Not known.

3-aminomethyl-3,5,5-trimethylcyclohexylamine

Other adverse effects Not known.

3,6-diazaoctanethylenediamin

Other adverse effects Not known.

SECTION 13: Disposal considerations

Waste treatment methods

General information Dispose of waste to licensed waste disposal site in accordance with the requirements of the local Waste Disposal Authority. Waste is classified as hazardous waste.

Disposal methods Dispose of contents/container in accordance with national regulations. Waste is classified as hazardous waste.

SECTION 14: Transport information

UN number

UN No. (ADG) 2735

UN No. (IMDG) 2735

UN No. (ICAO) 2735

UN proper shipping name

Proper shipping name (ADG) AMINES, LIQUID, CORROSIVE, N.O.S. (CONTAINS 3-aminomethyl-3,5,5-trimethylcyclohexylamine, 3,6-diazaoctanethylenediamin)

Proper shipping name (IMDG) AMINES, LIQUID, CORROSIVE, N.O.S. (CONTAINS 3-aminomethyl-3,5,5-trimethylcyclohexylamine, 3,6-diazaoctanethylenediamin)

Proper shipping name (ICAO) AMINES, LIQUID, CORROSIVE, N.O.S. (CONTAINS 3-aminomethyl-3,5,5-trimethylcyclohexylamine, 3,6-diazaoctanethylenediamin)

Transport hazard class(es)

ADG class 8

ADG classification code C7

ADG label 8

IMDG class 8

ICAO class/division 8

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Transport labels



Packing group

ADG packing group	II
IMDG packing group	II
ICAO packing group	II

Environmental hazards

Environmentally hazardous substance/marine pollutant

No.

Special precautions for user

IMDG Code segregation group	18. Alkalis
EmS	F-A, S-B
Hazchem Code	2X

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

SECTION 15: Regulatory information

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

Guidance Isocyanates: Health hazards and precautionary measures EH16.
Workplace Exposure Limits EH40.

Inventories

EU - EINECS/ELINCS

All the ingredients are listed or exempt.

SECTION 16: Any other relevant information

Abbreviations and acronyms used in the safety data sheet

ADG: Australian dangerous goods code
 IATA: International air transport association.
 IMDG: International maritime dangerous goods.
 LC₅₀: Lethal concentration to 50 % of a test population.
 LD₅₀: Lethal dose to 50% of a test population (median lethal dose).
 NOEC: No observed effect concentration.
 vPvB: Very persistent and very bioaccumulative.
 PBT: Persistent, bioaccumulative and toxic substance.
 UN: United Nations.

CAS: Chemical abstracts service.
 GHS: Globally harmonized system.

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Classification abbreviations and acronyms	Acute Tox. = Acute toxicity Eye Irrit. = Eye irritation Eye Dam. = Serious eye damage Skin Irrit. = Skin irritation Skin Corr. = Skin corrosion Resp. Sens. = Respiratory sensitisation Skin Sens. = Skin sensitisation STOT SE = Specific target organ toxicity-single exposure STOT RE = Specific target organ toxicity-repeated exposure Aquatic Acute = Hazardous to the aquatic environment (acute) Aquatic Chronic = Hazardous to the aquatic environment (chronic)
General information	Only trained personnel should use this material.
Revision comments	This is the first issue.
Revision date	19/03/2021
Revision	1
SDS No.	6956
Hazard statements in full	H302 Harmful if swallowed. H304 May be fatal if swallowed and enters airways. H312 Harmful in contact with skin. H314 Causes severe skin burns and eye damage. H317 May cause an allergic skin reaction. H318 Causes serious eye damage. H412 Harmful to aquatic life with long lasting effects.

This information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is, to the best of the company's knowledge and belief, accurate and reliable as of the date indicated. However, no warranty, guarantee or representation is made to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability of such information for his own particular use.