



SAFETY DATA SHEET TAMREZ 320 PART A

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 A

Product No. 61 - 100167165

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
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Torrensville,
SA 5031
Australia
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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 Irrit. 2 - H315 Eye Irrit. 2A - H319 Skin Sens. 1 - H317

Environmental hazards Aquatic Chronic 3 - H412

Label elements

Hazard pictograms



Signal word WARNING

Hazard statements H315 Causes skin irritation.
H319 Causes serious eye irritation.
H317 May cause an allergic skin reaction.
H412 Harmful to aquatic life with long lasting effects.

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Precautionary statements	<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>P273 Avoid release to the environment.</p> <p>P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.</p> <p>P302+P352 IF ON SKIN: Wash with plenty of soap and water.</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>P321 Specific treatment (see medical advice on this label).</p> <p>P332+P313 If skin irritation occurs: Get medical advice/ attention.</p> <p>P333+P313 If skin irritation or rash occurs: Get medical advice/ attention.</p> <p>P337+P313 If eye irritation persists: Get medical advice/ attention.</p> <p>P362+P364 Take off contaminated clothing and wash before reuse.</p> <p>P501 Dispose of contents/ container in accordance with national regulations.</p>
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Contains	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (reaction product: bisphenol-A-(epichlorhydrin))
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Other hazards

HSNO Classification

SECTION 3: Composition and information on ingredients

Mixtures

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (reaction product: bisphenol-A-(epichlorhydrin))	10-30%
CAS number: 25068-38-6	
Classification Skin Irrit. 2 - H315 Eye Irrit. 2A - H319 Skin Sens. 1 - H317 Aquatic Chronic 2 - H411	

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. Promptly get affected person to drink large volumes of water to dilute the swallowed chemical. Stop if the affected person feels sick as vomiting may be dangerous. If vomiting occurs, the head should be kept low so that vomit does not enter the lungs.
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.

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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 Irritating.

Ingestion May cause stomach pain or vomiting. May cause irritation. Gastrointestinal symptoms, including upset stomach.

Skin contact Causes skin irritation. May cause an allergic skin reaction.

Eye contact Causes serious 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.

Special hazards arising from the substance or mixture

Specific hazards The product is not flammable.

Hazardous combustion products None known.

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.

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

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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

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

Personal protective equipment for eye and face protection should comply with Australia/New Zealand Standard AS/NZS 1337.

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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 (or pale).
Odour	Characteristic.
Odour threshold	Not determined.
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.

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SECTION 10: Stability and reactivity

Reactivity	Amines.
Stability	Stable at normal ambient temperatures and when used as recommended.
Possibility of hazardous reactions	Acids. Alkalis. Oxidising agents. Amines.
Conditions to avoid	Avoid exposure to high temperatures or direct sunlight.
Materials to avoid	No specific requirements are anticipated under normal conditions of use.
Hazardous decomposition products	Heating may generate the following products: Carbon monoxide (CO). Carbon dioxide (CO ₂).

SECTION 11: Toxicological information

Information on toxicological effects

Acute toxicity - oral

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

Acute toxicity - dermal

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

Acute toxicity - inhalation

Notes (inhalation LC₅₀) Based on available data the classification criteria are not met.

Skin corrosion/irritation

Skin corrosion/irritation Causes skin irritation.

Serious eye damage/irritation

Serious eye damage/irritation Causes serious eye irritation.

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

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

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Toxicological information on ingredients.

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (reaction product: bisphenol-A-(epichlorhydrin))

Acute toxicity - oral

Notes (oral LD₅₀) LD₅₀ >5000 mg/kg, Oral, Rat

Acute toxicity - dermal

Acute toxicity dermal (LD₅₀) 20,000.0 mg/kg

Species Rabbit

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

ATE dermal (mg/kg) 20,000.0

Acute toxicity - inhalation

Notes (inhalation LC₅₀) Based on available data the classification criteria are not met.

Skin corrosion/irritation

Skin corrosion/irritation Causes skin irritation.

Serious eye damage/irritation

Serious eye damage/irritation Causes serious eye irritation.

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

Genotoxicity - in vitro OECD 476: Negative with metabolic activation., Negative without metabolic activation.

Carcinogenicity

Carcinogenicity Does not contain any substances known to be carcinogenic.

Reproductive toxicity

Reproductive toxicity - fertility Fertility - NOAEL 750 mg/kg/day, Oral, Rat

Reproductive toxicity - development Developmental toxicity: - NOAEL: 180 mg/kg/day, Oral, Rat

Specific target organ toxicity - single exposure

STOT - single exposure Not classified as a specific target organ toxicant after a single exposure.

Specific target organ toxicity - repeated exposure

STOT - repeated exposure Not classified as a specific target organ toxicant after repeated exposure.

Aspiration hazard

Aspiration hazard Not relevant.

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Ecotoxicity Toxic to aquatic life with long lasting effects.

Ecological information on ingredients.

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (reaction product: bisphenol-A- (epichlorhydrin))

Ecotoxicity Toxic 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.

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (reaction product: bisphenol-A- (epichlorhydrin))

Acute aquatic toxicity

Acute toxicity - fish LC₅₀, 96 hours: 2.3 mg/l, Oncorhynchus mykiss (Rainbow trout)

Acute toxicity - aquatic invertebrates LC₅₀, 48 hours: 1.8 mg/l, Daphnia magna

Acute toxicity - aquatic plants EC₅₀, 72 hours: 11 mg/l, Scenedesmus subspicatus
NOEC, 72 hours: 4.2 mg/l, Algae

Acute toxicity - microorganisms IC₅₀, 3 hours: >100 mg/l, Microorganisms

Persistence and degradability

Persistence and degradability No information available.

Ecological information on ingredients.

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (reaction product: bisphenol-A- (epichlorhydrin))

Persistence and degradability 117hr @ 25°C

Bioaccumulative potential

Bioaccumulative Potential No information available.

Ecological information on ingredients.

ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (reaction product: bisphenol-A- (epichlorhydrin))

Bioaccumulative Potential BCF: = 31, log Pow: = 3.242 (est) @ 25°C,

Mobility in soil

Mobility No information available.

Ecological information on ingredients.

TAMREZ 320 PART A**ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (reaction product: bisphenol-A-(epichlorhydrin))**

Mobility Koc=>426580

Other adverse effects

Other adverse effects None known.

Ecological information on ingredients.**ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (reaction product: bisphenol-A-(epichlorhydrin))**

Other adverse effects None 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

General The product is not covered by international regulations on the transport of dangerous goods (IMDG, IATA, ADG).

UN number

Not applicable.

UN proper shipping name

Not applicable.

Transport hazard class(es)

No transport warning sign required.

Packing group

Not applicable.

Environmental hazards

Environmentally hazardous substance/marine pollutant
No.

Special precautions for user

Not applicable.

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 Workplace Exposure Limits EH40.

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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	<p>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.</p> <p>CAS: Chemical abstracts service. GHS: Globally harmonized system.</p>
Classification abbreviations and acronyms	<p>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)</p>
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.	6955
Hazard statements in full	<p>H315 Causes skin irritation. H317 May cause an allergic skin reaction. H319 Causes serious eye irritation. H411 Toxic to aquatic life with long lasting effects. H412 Harmful to aquatic life with long lasting effects.</p>

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.