



## Safety Data Sheet

LOCTITE EA 3801 PTB

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SDS No. : 176824

V001.8

Date of issue: 17.06.2021

### Section 1. Identification of the substance/preparation and of the company/undertaking

**Product name:** LOCTITE EA 3801 PTB  
**Intended use:** Part B of 2-Component Epoxy Adhesive.

**Supplier:**  
Henkel Australia Pty Ltd  
135-141 Canterbury Road  
Kilsyth, Victoria, 3137  
Australia  
  
Phone: +61 (3) 9724 6444

**Emergency information:** 24 HOUR EMERGENCY CONTACT NUMBER: 1800 032 379

### Section 2. Hazards identification

**Classification of the substance or mixture**  
Hazardous according to the criteria of Safe Work Australia.

**GHS Classification:**

<u>Hazard Class</u>	<u>Hazard Category</u>
Skin corrosion	Category 1B
Serious eye damage/eye irritation	Category 1
Skin sensitizer	Category 1
Toxic to reproduction	Category 1B
Acute hazards to the aquatic environment	Category 3
Chronic hazards to the aquatic environment	Category 3

**Hazard pictogram:**



**Signal word:** Danger

<b>Hazard statement(s):</b>	H314 Causes severe skin burns and eye damage. H317 May cause an allergic skin reaction. H360 May damage fertility or the unborn child. H412 Harmful to aquatic life with long lasting effects.
<b>Precautionary Statement(s):</b>	
<b>Prevention:</b>	P201 Obtain special instructions before use. P202 Do not handle until all safety precautions have been read and understood. P261 Avoid breathing dust/fume/gas/mist/vapours/spray. P264 Wash hands thoroughly after handling. P272 Contaminated work clothing should not be allowed out of the workplace. P273 Avoid release to the environment. P280 Wear protective gloves/protective clothing/eye protection/face protection. P281 Use personal protective equipment as required.
<b>Response:</b>	P301+P330+P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]. P304+P340+P310 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or physician. P305+P351+P338+P315 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to remove. Continue rinsing. Get immediate medical advice/attention. P308+P313 IF exposed or concerned: Get medical advice/attention. P333+P313 If skin irritation or rash occurs: Get medical advice/attention. P363 Wash contaminated clothing before reuse.
<b>Storage:</b>	P405 Store locked up.
<b>Disposal:</b>	P501 Dispose of contents/container to an appropriate treatment and disposal facility in accordance with applicable laws and regulations.

**Dangerous Goods information:**

Classified as Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG Code).

**Section 3. Composition / information on ingredients**

<b>General chemical description:</b>	Mixture organic amine resins
<b>Type of preparation:</b>	Accelerator for epoxy systems

**Identity of ingredients:**

Chemical ingredients	CAS-No.	Proportion
2-piperazin-1-ylethylamine	140-31-8	10- < 30 %
3,6-diazaoctanethylenediamine	112-24-3	5- < 10 %
2,4,6-tris(dimethylaminomethyl)phenol	90-72-2	3- < 5 %
Silica, amorphous, fumed, cryst.-free	112945-52-5	< 10 %
2-(2-aminoethylamino)ethanol	111-41-1	1- < 3 %
2,2'-iminodiethylamine	111-40-0	1- < 3 %
2-Piperazin-1-ylethanol	103-76-4	1- < 3 %
non hazardous ingredients~		60- <= 100 %

**Section 4. First aid measures**

<b>Ingestion:</b>	Do not induce vomiting. Have victim rinse mouth thoroughly with water. Get medical attention.
<b>Skin:</b>	Immediately flush skin with plenty of water (using soap, if available). Remove contaminated clothing and footwear. Get medical attention. Wash clothing before reuse.
<b>Eyes:</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.
<b>Inhalation:</b>	If inhaled, immediately remove the affected person to fresh air. Keep warm and in a quiet place. Get medical attention.
<b>First Aid facilities:</b>	Eye wash and safety shower Normal washroom facilities
<b>Medical attention and special treatment:</b>	Treat symptomatically and supportively.

### Section 5. Fire fighting measures

<b>Suitable extinguishing media:</b>	Water spray (fog), foam, dry chemical or carbon dioxide.
<b>Improper extinguishing media:</b>	Water spray jet
<b>Decomposition products in case of fire:</b>	Thermal decomposition can lead to release of irritating gases and vapors. carbon monoxide Carbon dioxide Oxides of nitrogen.
<b>Special protective equipment for fire-fighters:</b>	Fire fighters should wear positive pressure self-contained breathing apparatus (SCBA). Wear full protective clothing.
<b>Additional fire fighting advice:</b>	In case of fire, keep containers cool with water spray. Collect contaminated fire fighting water separately. It must not enter drains.
<b>Hazchem code:</b>	2X

### Section 6. Accidental release measures

<b>Personal precautions:</b>	Ensure adequate ventilation. Avoid contact with skin and eyes. Wear appropriate personal protective equipment.
<b>Environmental precautions:</b>	Do not allow product to enter sewer or waterways.
<b>Clean-up methods:</b>	Evacuate and ventilate spill area; dike spill to prevent entry into water system; wear full protective equipment during clean-up. Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust). Scrape up as much material as possible. Store in a partly filled, closed container until disposal.

**Section 7. Handling and storage**

- Precautions for safe handling:** Use only with adequate ventilation.  
Prevent contact with eyes, skin and clothing. Do not breathe vapor and mist. Wash thoroughly after handling.  
Wear suitable protective clothing, safety glasses and gloves.  
Keep container closed.
- Conditions for safe storage:** Store only in the original container.  
Store in a cool, dry place.  
Keep away from heat and direct sunlight.  
Ensure that storage and workrooms are adequately ventilated.

**Section 8. Exposure controls / personal protection**

**National exposure standards:**

Ingredient [Regulated substance]	form of exposure	TWA (ppm)	TWA (mg/m3)	Peak Limit. (ppm)	Peak Limit. (mg/m3)	STEL (ppm)	STEL (mg/m3)
SILICA, AMORPHOUS: FUMED SILICA (RESPIRABLE DUST) 112945-52-5	Respirable dust.		2				
FUMED SILICA (RESPIRABLE DUST) 112945-52-5	Respirable dust.		2				
Nuisance dusts, inhalable dust 112945-52-5	Inhalable dust.		10				
DIETHYLENE TRIAMINE 111-40-0		1	4.2				

- Engineering controls:** Ensure good ventilation/suction at the workplace.
- Eye protection:** For eye protection, use tightly fitted safety goggles and a face-shield
- Skin protection:** Use chemical resistant, impermeable clothing including gloves and either an apron or body suit to prevent skin contact.  
The use of chemical resistant gloves such as Nitrile is recommended.
- Respiratory protection:** If inhalation risk exists, wear a respirator or air supplied mask complying with the requirements of AS/NZS 1715 and AS/NZS 1716.

**Section 9. Physical and chemical properties**

- Appearance:** opaque  
liquid
- Odor:** amine-like
- pH:** > 7
- Specific gravity:** 1.04
- Boiling point:** > 149 °C (> 300.2 °F)
- Flash point:** > 93 °C (> 199.4 °F)  
(Tagliabue closed cup)
- Vapor pressure:** < 5 mm hg  
(; 20 °C (68 °F))
- Density:** 1.04 g/cm3
- VOC content:** < 3 %  
(2010/75/EC)

### Section 10. Stability and reactivity

<b>Stability:</b>	Stable under normal conditions of temperature and pressure.
<b>Conditions to avoid:</b>	Excessive heat. Heat, flames, sparks and other sources of ignition. Store away from incompatible materials.
<b>Incompatible materials:</b>	Reaction with strong oxidants. Reaction with strong acids. Reaction with some curing agents may produce an exothermic reaction which in large masses could cause runaway polymerization.
<b>Hazardous decomposition products:</b>	Thermal decomposition can lead to release of irritating gases and vapors.  carbon monoxide Carbon dioxide. Oxides of nitrogen.

### Section 11. Toxicological information

**Health Effects:**

**Ingestion:** If ingested, severe burns of the mouth and throat may occur, as well as perforation of the esophagus and the stomach.

**Skin:** Corrosive to skin.  
Symptoms may include redness, burning, drying, cracking and skin burns.  
May cause allergic skin reaction.

**Eyes:** Contact with this product may cause severe eye damage.  
Contact with the eyes may cause moderate to severe eye injury. Eye contact may result in corneal injury. Symptoms may include discomfort or pain, excess blinking and tear production, with marked redness and swelling of the conjunctiva.

**Inhalation:** Can cause severe irritation and burns to the respiratory tract.

**Toxicity for reproduction:** May damage fertility or the unborn child.

**Acute toxicity:**

Hazardous components CAS-No.	Value type	Value	Route of application	Exposure time	Species	Method
2-piperazin-1-ylethylamine 140-31-8	LD50	866 mg/kg	dermal		rabbit	Draize Test
3,6-diazaoctanethylenediamine 112-24-3	LD50 LD50	1,591 mg/kg 1,465 mg/kg	oral dermal		rat rabbit	OECD Guideline 401 (Acute Oral Toxicity) OECD Guideline 402 (Acute Dermal Toxicity)
2,4,6-tris(dimethylaminomethyl)phenol 90-72-2	LD50	1,200 mg/kg	oral		rat	not specified
Silica, amorphous, fumed, cryst.-free 112945-52-5	LD50 LC0 LD50	> 5,000 mg/kg 0.139 mg/l > 2,000 mg/kg	oral inhalation dermal	4 h	rat rat rabbit	OECD Guideline 401 (Acute Oral Toxicity) not specified OECD Guideline 402 (Acute Dermal Toxicity)
2-(2-aminoethylamino)ethanol 111-41-1	LD50 LD50	2,150 mg/kg > 2,000 mg/kg	oral dermal		rat rabbit	BASF Test BASF Test
2,2'-iminodiethylamine 111-40-0	LD50 NOEL Acute toxicity estimate (ATE) LD50	1,553 mg/kg 0.07 mg/l 0.07 mg/l 1,045 mg/kg	oral inhalation inhalation dermal		rat rat rabbit	OECD Guideline 401 (Acute Oral Toxicity) OECD Guideline 403 (Acute Inhalation Toxicity) Expert judgement not specified
2-Piperazin-1-ylethanol 103-76-4	LD50 LD50	4,244 mg/kg > 5,000 mg/kg	oral dermal		rat rabbit	OECD Guideline 401 (Acute Oral Toxicity) not specified

**Skin corrosion/irritation:**

Hazardous components CAS-No.	Result	Exposure time	Species	Method
2-piperazin-1-ylethylamine 140-31-8	corrosive	20 min	rabbit	not specified
3,6-diazaoctanethylenediamine 112-24-3	corrosive		rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
2,4,6-tris(dimethylaminomethyl)phenol 90-72-2	corrosive	4 h	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
Silica, amorphous, fumed, cryst.-free 112945-52-5	not irritating	4 h	rabbit	OECD Guideline 404 (Acute Dermal Irritation / Corrosion)
2-(2-aminoethylamino)ethanol 111-41-1	corrosive		rabbit	BASF Test
2,2'-iminodiethylamine 111-40-0	corrosive	15 min	rabbit	BASF Test

**Serious eye damage/irritation:**

Hazardous components CAS-No.	Result	Exposure time	Species	Method
Silica, amorphous, fumed, cryst.-free 112945-52-5	not irritating		rabbit	OECD Guideline 405 (Acute Eye Irritation / Corrosion)
2-(2-aminoethylamino)ethanol 111-41-1	irritating		rabbit	BASF Test
2,2'-iminodiethylamine 111-40-0	corrosive	30 s	rabbit	not specified

**Respiratory or skin sensitization:**

Hazardous components CAS-No.	Result	Test type	Species	Method
2-piperazin-1-ylethylamine 140-31-8	sensitising	Guinea pig maximisation test	guinea pig	OECD Guideline 406 (Skin Sensitisation)
3,6-diazaoctanethylenediamine 112-24-3	sensitising	Buehler test	guinea pig	OECD Guideline 406 (Skin Sensitisation)
2,4,6-tris(dimethylaminomethyl)phenol 90-72-2	not sensitising	Buehler test	guinea pig	OECD Guideline 406 (Skin Sensitisation)
2,4,6-tris(dimethylaminomethyl)phenol 90-72-2	not sensitising	Guinea pig maximisation test	guinea pig	OECD Guideline 406 (Skin Sensitisation)
2-(2-aminoethylamino)ethanol 111-41-1	sensitising	Patch-Test	guinea pig	Patch Test
2,2'-iminodiethylamine 111-40-0	sensitising	Mouse local lymph node assay (LLNA)	mouse	OECD Guideline 429 (Skin Sensitisation: Local Lymph Node Assay)

**Germ cell mutagenicity:**

Hazardous components CAS-No.	Result	Type of study / Route of administration	Metabolic activation / Exposure time	Species	Method
2-piperazin-1-ylethylamine 140-31-8	negative negative negative	bacterial reverse mutation assay (e.g Ames test) DNA damage and repair assay, unscheduled DNA synthesis in mammalian cells in vitro mammalian cell gene mutation assay	with and without with and without with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay) not specified not specified
2-piperazin-1-ylethylamine 140-31-8	negative	intraperitoneal		mouse	not specified
3,6-diazaoctanethylenediamine 112-24-3	positive negative	bacterial reverse mutation assay (e.g Ames test) DNA damage and repair assay, unscheduled DNA synthesis in mammalian cells in vitro	with and without with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay) OECD Guideline 482 (Genetic Toxicology: DNA Damage and Repair, Unscheduled DNA Synthesis in Mammalian Cells In Vitro)
3,6-diazaoctanethylenediamine 112-24-3	negative	intraperitoneal		mouse	OECD Guideline 474 (Mammalian Erythrocyte Micronucleus Test)
2,4,6-tris(dimethylaminomethyl)phenol 90-72-2	negative negative negative	bacterial reverse mutation assay (e.g Ames test) in vitro mammalian chromosome aberration test mammalian cell gene mutation assay	with and without with and without with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay) OECD Guideline 473 (In vitro Mammalian Chromosome Aberration Test) OECD Guideline 476 (In vitro Mammalian Cell Gene Mutation Test)
Silica, amorphous, fumed, cryst.-free 112945-52-5	negative negative negative	bacterial reverse mutation assay (e.g Ames test) in vitro mammalian chromosome aberration test DNA damage and repair assay, unscheduled DNA synthesis in mammalian cells in vitro			not specified not specified not specified
2-(2-aminoethylamino)ethanol 111-41-1	negative	bacterial reverse mutation assay (e.g Ames test)	with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay)
2,2'-iminodiethylamine 111-40-0	positive negative	bacterial reverse mutation assay (e.g Ames test) in vitro mammalian chromosome aberration test	with and without with and without		OECD Guideline 471 (Bacterial Reverse Mutation Assay) Chromosome Aberration Test
2,2'-iminodiethylamine 111-40-0	negative negative	oral: gavage oral: gavage		mouse mouse	OECD Guideline 474 (Mammalian Erythrocyte Micronucleus Test) not specified



**Repeated dose toxicity:**

Hazardous components CAS-No.	Result	Route of application	Exposure time / Frequency of treatment	Species	Method
2-piperazin-1-ylethylamine 140-31-8	NOAEL=2000 ppm	oral: drinking water	>= 28 ddaily	rat	OECD Guideline 422 (Combined Repeated Dose Toxicity Study with the Reproduction / Developmental Toxicity Screening Test)
3,6- diazaoctanethylenediamin e 112-24-3	LOAEL=50 mg/kg	oral: gavage	26 wdaily	rat	OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)
3,6- diazaoctanethylenediamin e 112-24-3	NOAEL=50 mg/kg	oral: gavage	26 wdaily	rat	OECD Guideline 408 (Repeated Dose 90-Day Oral Toxicity in Rodents)
2-(2- aminoethylamino)ethanol 111-41-1	LOAEL=>= 250 mg/kg	oral: gavage	28 daysdaily	rat	Guidelines for 28-Day Repeat Dose Toxicity Test (Japan)
2-(2- aminoethylamino)ethanol 111-41-1	NOAEL=1,000 mg/kg		4 weeks6 hours/day, 5 days/week	rat	EPA Guideline
2,2'-iminodiethylamine 111-40-0	NOAEL=70 - 80 mg/kg	oral: feed	90 ddaily	rat	not specified
2,2'-iminodiethylamine 111-40-0	NOAEL=0.55 mg/l	inhalation: vapour	15 d6 h/d	rat	not specified

**Section 12. Ecological information**

**General ecological information:**

Do not empty into drains, soil or bodies of water.

**Toxicity:**

Hazardous components CAS-No.	Value type	Value	Acute Toxicity Study	Exposure time	Species	Method
2-piperazin-1-ylethylamine 140-31-8	LC50	> 100 mg/l	Fish	96 h	Salmo gairdneri (new name: Oncorhynchus mykiss)	OECD Guideline 203 (Fish, Acute Toxicity Test)
2-piperazin-1-ylethylamine 140-31-8	EC50	32 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
2-piperazin-1-ylethylamine 140-31-8	NOEC	31 mg/l	Algae	72 h	Selenastrum capricornutum (new name: Pseudokirchneriella subcapitata)	OECD Guideline 201 (Alga, Growth Inhibition Test)
2-piperazin-1-ylethylamine 140-31-8	EC50	495 mg/l	Algae	72 h	Selenastrum capricornutum (new name: Pseudokirchneriella subcapitata)	OECD Guideline 201 (Alga, Growth Inhibition Test)
2-piperazin-1-ylethylamine 140-31-8	EC10	100 mg/l	Bacteria	17 h		not specified
3,6- diazaoctanethylenediamine 112-24-3	LC50	570 mg/l	Fish	96 h	Poecilia reticulata	OECD Guideline 203 (Fish, Acute Toxicity Test)
3,6- diazaoctanethylenediamine 112-24-3	EC50	31 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
3,6- diazaoctanethylenediamine 112-24-3	EC10	< 2.5 mg/l	Algae	72 h	Selenastrum capricornutum (new name: Pseudokirchneriella subcapitata)	OECD Guideline 201 (Alga, Growth Inhibition Test)
3,6- diazaoctanethylenediamine 112-24-3	EC50	20 mg/l	Algae	72 h	Selenastrum capricornutum (new name: Pseudokirchneriella subcapitata)	OECD Guideline 201 (Alga, Growth Inhibition Test)
3,6- diazaoctanethylenediamine 112-24-3	EC0	137 mg/l	Bacteria	30 min	Pseudomonas putida	DIN 38412, part 27 (Bacterial oxygen consumption test)
2,4,6- tris(dimethylaminomethyl)phe nol 90-72-2	LC50	153 mg/l	Fish	96 h	Brachydanio rerio (new name: Danio rerio)	ISO 7346-1 (Determinatio n of the Acute Lethal Toxicity of Substances to a Freshwater Fish [Brachydanio rerio Hamilton- Buchanan (Teleostei, Cyprinidae)])
2,4,6- tris(dimethylaminomethyl)phe nol 90-72-2	EC50	84 mg/l	Algae	72 h	Scenedesmus subspicatus (new name: Desmodesmus subspicatus)	OECD Guideline 201 (Alga, Growth Inhibition Test)
2,4,6- tris(dimethylaminomethyl)phe nol 90-72-2	NOEC	6.25 mg/l	Algae	72 h	Desmodesmus subspicatus	OECD Guideline 201 (Alga, Growth Inhibition Test)
2,4,6- tris(dimethylaminomethyl)phe nol 90-72-2	EC0	27 mg/l	Bacteria	16 h	Pseudomonas putida	DIN 38412, part 8 (Pseudomonas Zellvermehrungshe mm-Test)
Silica, amorphous, fumed, cryst.-free 112945-52-5	LC50	> 10,000 mg/l	Fish	96 h	Brachydanio rerio (new name: Danio rerio)	OECD Guideline 203 (Fish, Acute Toxicity Test)
2-(2-aminoethylamino)ethanol 111-41-1	LC50	> 243 mg/l	Fish	48 h	Leuciscus idus	DIN 38412-15
2-(2-aminoethylamino)ethanol 111-41-1	EC50	22 mg/l	Daphnia	48 h	Daphnia magna	OECD Guideline 202 (Daphnia sp. Acute Immobilisation Test)
2-(2-aminoethylamino)ethanol 111-41-1	EC50	358 mg/l	Algae	72 h	Desmodesmus subspicatus	DIN 38412-09

2-(2-aminoethylamino)ethanol 111-41-1	EC10	156 mg/l	Algae	72 h	Desmodesmus subspicatus	DIN 38412-09
2-(2-aminoethylamino)ethanol 111-41-1	EC10	82.2 mg/l	Bacteria	17 h	Pseudomonas putida	DIN 38412, part 8 (Pseudomonas Zellvermehrungshe- mm-Test)
2,2'-iminodiethylamine 111-40-0	LC50	430 mg/l	Fish	96 h	Poecilia reticulata	EU Method C.1 (Acute Toxicity for Fish)
2,2'-iminodiethylamine 111-40-0	NOEC	> 10 mg/l	Fish	28 d	Gasterosteus aculeatus	OECD Guideline 210 (fish early lite stage toxicity test)
2,2'-iminodiethylamine 111-40-0	EC50	64.6 mg/l	Daphnia	48 h	Daphnia magna	EU Method C.2 (Acute Toxicity for Daphnia)
2,2'-iminodiethylamine 111-40-0	EC50	1,164 mg/l	Algae	72 h	Selenastrum capricornutum (new name: Pseudokirchneriella subcapitata)	OECD Guideline 201 (Alga, Growth Inhibition Test)
2,2'-iminodiethylamine 111-40-0	NOEC	10 mg/l	Algae	72 h	Selenastrum capricornutum (new name: Pseudokirchneriella subcapitata)	OECD Guideline 201 (Alga, Growth Inhibition Test)
2,2'-iminodiethylamine 111-40-0	NOEC	6 mg/l	Bacteria	3 h	anaerobic bacteria	not specified
2-Piperazin-1-ylethanol 103-76-4	EC50	384 mg/l	Daphnia	48 h	Daphnia magna	not specified

**Persistence and degradability:**

Hazardous components CAS-No.	Result	Route of application	Degradability	Method
2-piperazin-1-ylethylamine 140-31-8	under test conditions no biodegradation observed	aerobic	0 %	OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)
3,6- diazaoctanethylenediamine 112-24-3	not inherently biodegradable	aerobic	0 %	OECD Guideline 302 B (Inherent biodegradability: Zahn- Wellens/EMPA Test)
3,6- diazaoctanethylenediamine 112-24-3	not readily biodegradable.	aerobic	0 %	OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)
2,4,6- tris(dimethylaminomethyl)phe- nol 90-72-2	not readily biodegradable.	aerobic	4 %	OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)
2-(2-aminoethylamino)ethanol 111-41-1	readily biodegradable	aerobic	> 60 %	OECD Guideline 301 F (Ready Biodegradability: Manometric Respirometry Test)
2,2'-iminodiethylamine 111-40-0	inherently biodegradable	aerobic	83 %	EU Method C.9 (Biodegradation: Zahn-Wellens Test)
2,2'-iminodiethylamine 111-40-0	readily biodegradable	aerobic	87 %	OECD Guideline 301 D (Ready Biodegradability: Closed Bottle Test)

**Bioaccumulative potential / Mobility in soil:**

Hazardous components CAS-No.	LogPow	Bioconcentration factor (BCF)	Exposure time	Species	Temperature	Method
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2-piperazin-1-ylethylamine 140-31-8	-1.48					OECD Guideline 107 (Partition Coefficient (n-octanol / water), Shake Flask Method)
3,6-diazaoctanethylenediamine 112-24-3	-2.65					OECD Guideline 107 (Partition Coefficient (n-octanol / water), Shake Flask Method)
2,4,6-tris(dimethylaminomethyl)phe nol 90-72-2	-0.66				21.5 °C	EPA OPPTS 830.7550 (Partition Coefficient, n-octanol / H <sub>2</sub> O, Shake Flask Method)
2-(2-aminoethylamino)ethanol 111-41-1		2.1 - 3.7	42 d	Cyprinus carpio	25 °C	OECD Guideline 305 C (Bioaccumulation: Test for the Degree of Bioconcentration in Fish)
2-(2-aminoethylamino)ethanol 111-41-1	-1.46				25 °C	OECD Guideline 107 (Partition Coefficient (n-octanol / water), Shake Flask Method)
2,2'-iminodiethylamine 111-40-0		> 0.3 - < 6.3	42 d	Cyprinus carpio		OECD Guideline 305 C (Bioaccumulation: Test for the Degree of Bioconcentration in Fish)
2,2'-iminodiethylamine 111-40-0	-1.58				20 °C	QSAR (Quantitative Structure Activity Relationship)
2-Piperazin-1-ylethanol 103-76-4	-1.56				25 °C	not specified

### Section 13. Disposal considerations

**Waste disposal of product:** Dispose of according to Federal, State and local governmental regulations.

**Disposal for uncleaned package:** Packaging that cannot be cleaned are to be disposed of in the same manner as the product.

### Section 14. Transport information

#### Road and Rail Transport:

Dangerous Goods information: Classified as Dangerous Goods according to the criteria of the Australian Code for the Transport of Dangerous Goods by Road and Rail (ADG Code).

UN no.: 3267

Proper shipping name: CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S.  
(Triethylenetetramine, Aminoethylpiperazine)

Class or division: 8

Packing group: II

Hazchem code: 2X

Emergency information: Refer to the Australian Emergency Response Guide Book

#### Marine transport IMDG:

UN no.: 3267

Proper shipping name: CORROSIVE LIQUID, BASIC, ORGANIC, N.O.S.  
(Triethylenetetramine, Aminoethylpiperazine)

Class or division: 8

Packing group: II

EmS: F-A ,S-B

Seawater pollutant: -

**Air transport IATA:**

UN no.:	3267
Proper shipping name:	Corrosive liquid, basic, organic, n.o.s. (Triethylenetetramine, Aminoethylpiperazine)
Class or division:	8
Packing group:	II
Packing instructions (passenger)	851
Packing instructions (cargo)	855

**Section 15. Regulatory information****SUSMP Poisons Schedule** 5**Section 16. Other information**

**Abbreviations/acronyms:** ADGC - Australian Dangerous Goods Code  
GHS: Globally Harmonized System  
CAS: Chemical Abstracts Service  
NOAEL: No Observed Adverse Effect Level  
LD 50: Lethal Dose 50%  
OECD: Organization for Economic Cooperation and Development  
LC 50: Lethal Concentration 50%  
IMDG: International Maritime Dangerous Goods code  
IATA-DGR: International Air Transport Association – Dangerous Goods Regulations  
STEL - Short term exposure limit  
TWA - Time weighted average  
AIIC - Australian Inventory of Industrial Chemicals (AIIC)  
AICIS - Australian Industrial Chemicals Introduction Scheme

**Reason for issue:** Reviewed SDS. Reissued with new date. involved chapters: 1-16**Date of previous issue:** 20.05.2020**Disclaimer:**

The percentage weight (% w/w) of ingredients is not to be taken as a specification guaranteed by Henkel Australia Pty. Limited, but only as an approximate guide to the content of hazardous ingredients in the material. The information contained herein does not constitute a guarantee by Henkel Australia Pty. Limited concerning the properties of the material.

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