

# SAFETY DATA SHEET



Revision date: 09-Sep-2024

Revision Number 2

## Section 1: Identification

### Product identifier

**Product Name** Tufflon P90 AS Part B

**Product Code(s)** 000000067100

### Other means of identification

**UN number or ID number** 2735

### Recommended use of the chemical and restrictions on use

**Recommended use** Component of a polyurea system.

**Uses advised against** No information available.

### Details of manufacturer or importer

#### **Supplier**

Liquimix Pty Ltd  
ABN: 32 062 887 585  
Street Address: 24 Rosa Place  
Richlands QLD 4077  
Australia

Telephone Number: +61 7 3277 6655

### Emergency telephone number

Emergency telephone number **1 800 033 111 (ALL HOURS)**

Please ensure you refer to the limitations of this Safety Data Sheet as set out in the "Other Information" section at the end of this Data Sheet.

## Section 2: Hazard identification

Classified as a hazardous substance in accordance with the criteria of Safe Work Australia - Globally Harmonized System (GHS).  
Classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for Transport by Road and Rail; DANGEROUS GOODS.

### GHS Classification

<b>Acute toxicity - Oral</b>	Category 4
<b>Acute toxicity - Dermal</b>	Category 4
<b>Skin corrosion/irritation</b>	Category 1
<b>Serious eye damage/eye irritation</b>	Category 1
<b>Specific target organ toxicity (repeated exposure)</b>	Category 2
<b>Acute aquatic toxicity</b>	Category 1
<b>Chronic aquatic toxicity</b>	Category 1

### Label elements

Corrosion  
Health hazard  
Exclamation mark

## Environment



**Signal word**  
DANGER

**Hazard statements**

H314 - Causes severe skin burns and eye damage  
H302 + H312 - Harmful if swallowed or in contact with skin  
H373 - May cause damage to organs through prolonged or repeated exposure  
H410 - Very toxic to aquatic life with long lasting effects

**Precautionary Statements - Prevention**

Do not breathe dust/fume/gas/mist/vapors/spray.  
Do not eat, drink or smoke when using this product.  
Wear protective gloves/clothing and eye/face protection.  
Wash face, hands and any exposed skin thoroughly after handling.  
Avoid release to the environment.

**Precautionary Statements - Response**

IF exposed: Get medical advice/attention if you feel unwell.  
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.  
IF ON SKIN: Wash with plenty of soap and water. Immediately call a POISON CENTER or doctor/physician.  
Take off contaminated clothing and wash before reuse.  
IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.  
IF SWALLOWED: Immediately call a POISON CENTER or doctor/physician.  
Collect spillage.

**Precautionary Statements - Storage**

Store in a well-ventilated place. Keep cool.  
Store locked up.

**Precautionary Statements - Disposal**

Dispose of contents/container in accordance with local, regional, national, and international regulations as applicable.

**Other hazards which do not result in classification****Section 3: Composition and information on ingredients**

Chemical name	CAS No.	Weight-%
Glyceryl poly(oxypropylene)triamine	64852-22-8	30 - 60%
Diethylmethylbenzenediamine	68479-98-1	10 - 30%
Polyoxypropylenediamine	9046-10-0	10 - 30%
Tris(2-chloro-1-methylethyl)phosphate	13674-84-5	< 3%
3-Glycidoxypropyltrimethoxy silane	2530-83-8	< 3%
Quaternary ammonium compounds, coco alkylethyldimethyl, Et sulfates	68308-64-5	< 3%

**Section 4: First aid measures****Description of first aid measures****General advice**

For advice, contact a Poisons Information Centre (e.g. phone Australia 13 11 26; New

Zealand 0800 764 766) or a doctor.

<b>Inhalation</b>	Move to fresh air in case of accidental inhalation of vapors. Medical aid is necessary if symptoms appear to be an obvious consequence of inhalation. Treatment should be symptomatic and supportive.
<b>Eye contact</b>	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Do not rub affected area. Remove contact lenses, if present and easy to do. Continue rinsing. Seek immediate medical attention/advice.
<b>Skin contact</b>	Wash off immediately with soap and plenty of water. Take off contaminated clothing and wash before reuse. Get medical attention if irritation develops and persists. For severe burns, immediate medical attention is required.
<b>Ingestion</b>	Rinse mouth thoroughly with water. Drink 1 or 2 glasses of water. Get medical attention.

#### **Most important symptoms and effects, both acute and delayed**

<b>Symptoms</b>	No information available.
<b>Effects of Exposure</b>	No information available.

#### **Indication of any immediate medical attention and special treatment needed**

<b>Note to physicians</b>	Treat symptomatically.
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### **Section 5: Firefighting measures**

#### **Suitable Extinguishing Media**

**Suitable extinguishing media** Dry chemical, CO2, water spray or regular foam.

**Unsuitable extinguishing media** High volume water jet.

#### **Specific hazards arising from the chemical**

**Specific hazards arising from the chemical** Thermal decomposition can lead to release of irritating and toxic gases and vapors.

#### **Special protective actions for fire-fighters**

**Special protective equipment and precautions for fire-fighters** Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear. Use personal protection equipment.

**Hazchem code** •2X

### **Section 6: Accidental release measures**

#### **Personal precautions, protective equipment and emergency procedures**

**Personal precautions** Ensure adequate ventilation. Evacuate personnel to safe areas. Use personal protective equipment as required. See section 8 for more information. Avoid contact with skin, eyes or clothing. Keep people away from and upwind of spill/leak.

**Other information** Refer to protective measures listed in Sections 7 and 8.

**For emergency responders** Use personal protection recommended in Section 8.

#### Environmental precautions

**Environmental precautions** See Section 12 for additional Ecological Information.

#### Methods and material for containment and cleaning up

**Methods for containment** Stop leak if you can do it without risk. Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see Section 13).

**Methods for cleaning up** Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal. Dike far ahead of spill to collect runoff water. Prevent product and washings from entering drains, sewers or surface water due to high toxicity to aquatic organisms.

### **Section 7: Handling and storage**

#### Precautions for safe handling

**Advice on safe handling** Use personal protection equipment. Avoid breathing vapors or mists. Avoid contact with skin, eyes or clothing. Handle in accordance with good industrial hygiene and safety practice.

**General hygiene considerations** Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash it before reuse. Wash hands and face before breaks and immediately after handling the product. Wear suitable gloves and eye/face protection.

#### Conditions for safe storage, including any incompatibilities

**Storage Conditions** Keep containers tightly closed in a dry, cool and well-ventilated place.

**Incompatible materials** Strong oxidizing agents, strong acids, and strong bases.

### **Section 8: Exposure controls and personal protection**

#### Control parameters

**Exposure Limits** This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies

#### Appropriate engineering controls

**Engineering controls** Showers  
Eyewash stations  
Ventilation systems.

#### Individual protection measures, such as personal protective equipment

The selection of PPE is dependent on a detailed risk assessment. The risk assessment should consider the work situation, the physical form of the chemical, the handling methods, and environmental factors.

OVERALLS, CHEMICAL GOGGLES, FACE SHIELD, GLOVES (Long), APRON, RUBBER BOOTS.



<b>Eye/face protection</b>	Wear safety glasses with side shields (or goggles). Face protection shield.
<b>Skin and body protection</b>	Wear suitable protective clothing.
<b>Hand protection</b>	Impervious gloves.
<b>Respiratory protection</b>	No protective equipment is needed under normal use conditions. If exposure limits are exceeded or irritation is experienced, ventilation and evacuation may be required. If determined by a risk assessment an inhalation risk exists, wear an organic vapour respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716.
<b>Environmental exposure controls</b>	Do not allow into any sewer, on the ground or into any body of water. Local authorities should be advised if significant spillages cannot be contained.
<b>Thermal hazards</b>	No information available.

## Section 9: Physical and chemical properties

### Information on basic physical and chemical properties

<b>Physical state</b>	Liquid
<b>Appearance</b>	Clear
<b>Color</b>	Dark red
<b>Odor</b>	Amine -like
<b>Odor threshold</b>	No information available

<u>Property</u>	<u>Values</u>	<u>Remarks • Method</u>
<b>pH</b>	No data available	None known
<b>pH (as aqueous solution)</b>	No data available	None known
<b>Melting point / freezing point</b>	No data available	None known
<b>Boiling point / boiling range</b>	No data available	None known
<b>Flash point</b>	> 116°C	CC (closed cup)
<b>Evaporation rate</b>	No data available	None known
<b>Flammability (solid, gas)</b>	No data available	None known
<b>Flammability Limit in Air</b>		None known
<b>Upper flammability or explosive limits</b>	No data available	
<b>Lower flammability or explosive limits</b>	No data available	
<b>Vapor pressure</b>	No data available	None known
<b>Vapor density</b>	No data available	None known
<b>Relative density</b>	1.00	None known
<b>Water solubility</b>	No data available	None known
<b>Solubility(ies)</b>	No data available	None known
<b>Partition coefficient</b>	No data available	None known
<b>Autoignition temperature</b>	No data available	None known
<b>Decomposition temperature</b>	No data available	None known
<b>Kinematic viscosity</b>	No data available	None known
<b>Dynamic viscosity</b>	720 - 860 mPa s	None known

### Other information

**Section 10: Stability and reactivity****Reactivity**

**Reactivity** Non-reactive under normal conditions of use, storage and transport.

**Chemical stability**

**Stability** Stable under normal conditions.

**Explosion data**

**Sensitivity to mechanical impact** None.

**Sensitivity to static discharge** None.

**Possibility of hazardous reactions**

**Possibility of hazardous reactions** None under normal processing.

**Conditions to avoid**

**Conditions to avoid** None known based on information supplied.

**Incompatible materials**

**Incompatible materials** Strong oxidizing agents, strong acids, and strong bases.

**Hazardous decomposition products**

**Hazardous decomposition products** Carbon oxides. Nitrogen oxides. Hydrogen chloride.

**Section 11: Toxicological information****Information on likely routes of exposure**

**Product Information** No adverse health effects expected if the chemical is handled in accordance with this Safety Data Sheet and the chemical label. Symptoms or effects that may arise if the chemical is mishandled and overexposure occurs are:

**Inhalation** Inhalation of vapors in high concentration may cause irritation of respiratory system.

**Eye contact** Causes serious eye irritation. May cause burns.

**Skin contact** Causes skin irritation. Harmful in contact with skin.

**Ingestion** Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea. Harmful if swallowed.

**Symptoms** No information available.

**Acute toxicity****Numerical measures of toxicity - Product Information**

No information available

**Component Information**

Chemical name	Oral LD50	Dermal LD50	Inhalation LC50
Diethylmethylbenzenediamine	= 485 mg/kg ( Rat )	= 700 mg/kg ( Rabbit )	-

Polyoxypropylenediamine	= 242 mg/kg ( Rat )	= 2980 mg/kg ( Rabbit )	> 0.74 mg/L ( Rat ) 8 h
Tris(2-chloro-1-methylethyl)phosphate	= 1500 mg/kg ( Rat )	> 5000 mg/kg ( Rabbit )	> 5.05 mg/L ( Rat ) 4 h
3-Glycidoxypropyltrimethoxy silane	= 7010/mg/kg Rat ) = 22600 µL/kg ( Rat )	= 3.97 mL/kg ( Rabbit )	> 5.3 mg/L ( Rat ) 4 h

See section 16 for terms and abbreviations

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

<b>Skin corrosion/irritation</b>	Causes skin irritation. Causes burns.
<b>Serious eye damage/eye irritation</b>	Causes serious eye irritation. Causes burns.
<b>Respiratory or skin sensitization</b>	No information available.
<b>Germ cell mutagenicity</b>	No information available.
<b>Carcinogenicity</b>	No information available.
<b>Reproductive toxicity</b>	No information available.
<b>STOT - single exposure</b>	No information available.
<b>STOT - repeated exposure</b>	May cause damage to organs through prolonged or repeated exposure. Possible target organs: liver, kidneys.
<b>Aspiration hazard</b>	No information available.

## **Section 12: Ecological information**

### Ecotoxicity

**Aquatic ecotoxicity** Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. Keep out of waterways.

Chemical name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Tris(2-chloro-1-methylethyl)phosphate	EC50: =45mg/L (72h, Desmodesmus subspicatus) EC50: =4mg/L (96h, Pseudokirchneriella subcapitata)	LC50: =56.2mg/L (96h, Brachydanio rerio) LC50: =98mg/L (96h, Pimephales promelas) LC50: =30mg/L (96h, Poecilia reticulata)	-	EC50: =63mg/L (48h, Daphnia magna)
3-Glycidoxypropyltrimethoxy silane	-	LC50: =55mg/L (96h, Cyprinus carpio)	-	-

**Terrestrial ecotoxicity** There is no data for this product.

#### Persistence and degradability

**Persistence and degradability** For the major component: Not readily biodegradable.

#### Bioaccumulative potential

**Bioaccumulation** There is no data for this product.

#### **Component Information**

Chemical name	Partition coefficient
Diethylmethylbenzenediamine	1.4
Polyoxypropylenediamine	1.34
Tris(2-chloro-1-methylethyl)phosphate	2.68

#### Mobility

**Mobility** No information available.

#### Other adverse effects

**Other adverse effects** No information available.

### **Section 13: Disposal considerations**

#### Waste treatment methods

**Waste from residues/unused products** Dispose of in accordance with local regulations. Triple or preferably pressure rinse containers before disposal. Add rinsings to spray tank. Do not dispose of undiluted chemicals on site. If recycling, replace cap and return clean containers to recycler or designated collection point. If not recycling, break, crush or puncture and deliver empty packaging to an approved waste management facility. If an approved waste management facility is not available, bury the empty packaging 500 mm below the surface in a disposal pit specifically marked and set up for this purpose, clear of waterways, desirable vegetation and tree roots in compliance with relevant local, state or territory government regulations. Do not burn empty containers or product.

**Contaminated packaging** Dispose of contents/containers in accordance with local regulations.

See section 8 for more information

### **Section 14: Transport information**

**ADG** Classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for Transport by Road and Rail; DANGEROUS GOODS.

**UN number or ID number** 2735  
**Proper shipping name** AMINES, LIQUID, CORROSIVE, N.O.S. (CONTAINS POLYOXYPROPYLENEDIAMINE)  
**Transport hazard class(es)** 8  
**Packing group** III  
**Hazchem code** •2X

**IATA** Classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air; DANGEROUS GOODS.



**UN number** 2735  
**UN proper shipping name** AMINES, LIQUID, CORROSIVE, N.O.S. (CONTAINS POLYOXYPROPYLENEDIAMINE)  
**Transport hazard class(es)** 8  
**Packing group** III

**IMDG** Classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea; DANGEROUS GOODS.

**UN number** 2735  
**UN proper shipping name** AMINES, LIQUID, CORROSIVE, N.O.S. (CONTAINS POLYOXYPROPYLENEDIAMINE)  
**Transport hazard class(es)** 8  
**Packing group** III  
**IMDG EMS Fire** F-A  
**IMDG EMS Spill** S-B

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code**  
No information available

## Section 15: Regulatory information

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

#### National regulations

##### Australia

Classified as a hazardous substance in accordance with the criteria of Safe Work Australia - Globally Harmonized System (GHS).  
Classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for Transport by Road and Rail; DANGEROUS GOODS.

See section 8 for national exposure control parameters

#### **Standard for Uniform Scheduling of Medicines and Poisons (SUSMP)**

Classified as a scheduled poison according to the Standard for Uniform Scheduling of Medicines and Poisons (SUSMP)

**Poison Schedule Number** 6

#### **Australian Industrial Chemicals Introduction Scheme (AICIS)**

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Chemical name	Australian Industrial Chemicals Introduction Scheme (AICIS)	Additional information
Diethylmethylbenzenediamine - 68479-98-1	Present	-
Polyoxypropylenediamine - 9046-10-0	Present	-
Tris(2-chloro-1-methylethyl)phosphate - 13674-84-5	Present	Specific information requirement: Obligations to provide information apply. You must tell us within 28 days if the circumstances of your importation or manufacture (introduction) are different to those in our assessment.
3-Glycidoxypropyltrimethoxy silane - 2530-83-8	Present	-
Quaternary ammonium compounds, coco alkylethyldimethyl, Et sulfates - 68308-64-5	Present	-

#### **Illicit Drug Precursors/Reagents**

This product does not contain any substance(s) on the Illicit Drug Precursors/Reagents list.

### International Inventories

<b>AIIC</b>	All the constituents of this material are listed on the Australian Inventory of Industrial Chemicals.
<b>NZIoC</b>	Contact supplier for inventory compliance status.
<b>TSCA</b>	Contact supplier for inventory compliance status.
<b>DSL/NDSL</b>	Contact supplier for inventory compliance status.
<b>EINECS/ELINCS</b>	Contact supplier for inventory compliance status.
<b>ENCS</b>	Contact supplier for inventory compliance status.
<b>IECSC</b>	Contact supplier for inventory compliance status.
<b>KECL</b>	Contact supplier for inventory compliance status.
<b>PICCS</b>	Contact supplier for inventory compliance status.

#### Legend:

**AIIC**- Australian Inventory of Industrial Chemicals

**NZIoC** - New Zealand Inventory of Chemicals

**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory

**DSL/NDSL** - Canadian Domestic Substances List/Non-Domestic Substances List

**EINECS/ELINCS** - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

**ENCS** - Japan Existing and New Chemical Substances

**IECSC** - China Inventory of Existing Chemical Substances

**KECL** - Korean Existing and Evaluated Chemical Substances

**PICCS** - Philippines Inventory of Chemicals and Chemical Substances

### International Regulations

**The Montreal Protocol on Substances that Deplete the Ozone Layer** Not applicable

**The Stockholm Convention on Persistent Organic Pollutants** Not applicable

**The Rotterdam Convention** Not applicable

## **Section 16: Other information**

**Reason(s) For Issue:** 5 Yearly Revised Primary SDS

**Prepared By** This Safety Data Sheet has been prepared by IXOM Operations Pty Ltd (Toxicology and SDS Services).

**Revision date:** 09-Sep-2024

#### **Revision Note:**

The symbol (\*) in the margin of this SDS indicates that this line has been revised.

#### **Key or legend to abbreviations and acronyms used in the safety data sheet**

##### **Legend**

SVHC: Substances of Very High Concern for Authorization:

PBT: Persistent, Bioaccumulative, and Toxic (PBT) Substances

vPvB: Very Persistent and very Bioaccumulative (vPvB) Substances

STOT: Specific Target Organ Toxicity

ATE: Acute Toxicity Estimate

LC50: 50% Lethal Concentration

LD50: 50% Lethal Dose

**Legend Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION**

TWA	TWA (time-weighted average)	STEL	STEL (Short Term Exposure Limit)
Ceiling	Maximum limit value	*	Skin designation
C	Carcinogen		

**Key literature references and sources for data used to compile the SDS**

Agency for Toxic Substances and Disease Registry (ATSDR)  
U.S. Environmental Protection Agency ChemView Database  
European Food Safety Authority (EFSA)  
Environmental Protection Agency  
Acute Exposure Guideline Level(s) (AEGL(s))  
U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act  
U.S. Environmental Protection Agency High Production Volume Chemicals  
Food Research Journal  
Hazardous Substance Database  
International Uniform Chemical Information Database (IUCLID)  
National Institute of Technology and Evaluation (NITE)  
Australia National Industrial Chemicals Notification and Assessment Scheme (NICNAS)  
Australian Industrial Chemicals Introduction Scheme (AICIS)  
NIOSH (National Institute for Occupational Safety and Health)  
National Library of Medicine's ChemID Plus (NLM CIP)  
National Library of Medicine's PubMed database (NLM PUBMED)  
U.S. National Toxicology Program (NTP)  
New Zealand's Chemical Classification and Information Database (CCID)  
Organization for Economic Co-operation and Development Environment, Health, and Safety Publications  
Organization for Economic Co-operation and Development High Production Volume Chemicals Program  
Organization for Economic Co-operation and Development Screening Information Data Set  
World Health Organization

**Disclaimer**

**This SDS summarises to our best knowledge at the date of issue, the chemical health and safety hazards of the material and general guidance on how to safely handle the material in the workplace. Since Liquimix Pty Ltd cannot anticipate or control the conditions under which the product may be used, each user must, prior to usage, assess and control the risks arising from its use of the material.**

**If clarification or further information is needed, the user should contact their Liquimix representative or Liquimix Pty Ltd at the contact details on page 1.**

**Liquimix Pty Ltd's responsibility for the material as sold is subject to the terms and conditions of sale, a copy of which is available upon request.**

**End of Safety Data Sheet**