

Australian statement of hazardous nature : Classified as hazardous according to criteria of Safe Work Australia

## Section 1 - Identification

**Product Name** Salmonella O Polyvalent (Group E) Agglutinating Sera

|                                |  |
|--------------------------------|--|
| <b>Product Code</b>            | <b>R30956801</b>   |
| <b>Address</b>                 | ThermoFisher Scientific Australia Pty Ltd<br>5 Caribbean Drive, Scoresby<br>VICTORIA 3179, Australia |
| <b>Emergency Tel.</b>          | <b>CHEMTREC®</b><br><b>03 9757 4559 or +613 9757 4559</b>  |
| <b>Telephone / Fax Numbers</b> | Tel: 1300 735 292<br>Fax: 1800 067 639   |
| <b>E-mail address</b>          | ANZinfo@thermofisher.com   |

**Recommended Use** Laboratory chemicals.

**Uses advised against** This product contains one or more substance(s) on the Illicit Drug Precursors/Reagents list. Verify requirements related to using, handling and storing these substances. This product does not contain any substance(s) subject to Prohibition, Authorization or Restriction. This product does not contain any substance(s) listed on the voluntary National Code of Practice for Chemicals of Security Concern.

## Section 2 - Hazard(s) Identification

### Classification under Safe Work Australia

Classified as hazardous according to criteria of Safe Work Australia

**Physical hazards**  
No hazards identified

### **Health hazards**

Skin Corrosion/Irritation  
Serious Eye Damage/Eye Irritation  
Germ Cell Mutagenicity

Category 2  
Category 2  
Category 2

**Environmental hazards**  
No hazards identified

### Label Elements



Health Hazard



Exclamation Mark

**Signal Word**

**Warning**

**Hazard Statements**

H315 - Causes skin irritation  
H319 - Causes serious eye irritation  
H341 - Suspected of causing genetic defects if inhaled

**Precautionary Statements**

P201 - Obtain special instructions before use  
P202 - Do not handle until all safety precautions have been read and understood  
P264 - Wash face, hands and any exposed skin thoroughly after handling  
P280 - Wear protective gloves/protective clothing/eye protection/face protection  
P302 + P352 - IF ON SKIN: Wash with plenty of soap and water  
P305 + P351 + P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing  
P308 + P313 - IF exposed or concerned: Get medical advice/attention  
P332 + P313 - If skin irritation occurs: Get medical advice/attention  
P362 + P364 - Take off contaminated clothing and wash it before reuse  
P403 - Store in a well-ventilated place  
P501 - Dispose of contents/ container to an approved waste disposal plant

**Other information**

No information available  
This product does not contain any known or suspected endocrine disruptors

## Section 3 - Composition and Information on Ingredients

| Component        | CAS No    | Weight % |
|------------------|-----------|----------|
| Phenol           | 108-95-2  | <1.0     |
| Sodium hydroxide | 1310-73-2 | <0.5     |

## Section 4 - First Aid Measures

|  |  |
|--|--|
| <b>Inhalation</b>                          | Remove to fresh air. Get medical attention if symptoms occur.  |
| <b>Ingestion</b>                           | Clean mouth with water and drink afterwards plenty of water. Get medical attention.  |
| <b>Skin Contact</b>                        | Wash off immediately with soap and plenty of water. Get medical attention immediately if symptoms occur.   |
| <b>Eye Contact</b>                         | Rinse thoroughly with plenty of water, also under the eyelids. Seek immediate medical attention/advice.  |
| <b>Self-Protection of the First Aider</b>  | Ensure that medical personnel are aware of the material(s) involved, take precautions to protect themselves and prevent spread of contamination. |
| <b>First Aid Facilities</b>                | Eyewash, safety shower and washroom.   |
| <b>Most important symptoms and effects</b> | No information available.  |
| <b>Notes to Physician</b>                  | Treat symptomatically.   |

## Section 5 - Fire Fighting Measures

**Suitable Extinguishing Media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**Extinguishing media which must not be used for safety reasons**

No information available.

**Hazardous Decomposition Products**

Hydrogen bromide, Carbon oxides, Nitrogen oxides (NO<sub>x</sub>).

**Specific Hazards Arising from the Chemical**

Thermal decomposition can lead to release of irritating gases and vapors.

**Special protective equipment and precautions for fire fighters**

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## Section 6 - Accidental Release Measures

**Emergency procedures**

Avoid contact with skin, eyes or clothing. Ensure adequate ventilation.

**Environmental Precautions**

See Section 12 for additional Ecological Information.

**Methods for Containment and Clean Up**

**Clean-up methods - small spillage**

Soak up with inert absorbent material. Clean contaminated surface thoroughly.

**Clean-up methods - large spillage**

Typically only supplied in small quantities as packaged goods.

If extremely toxic or used in larger quantities ensure a spillage action plan is in place. Evacuate area. Control the source and/or contain the spill if safe and able to do so. Use temporary diking, sand bags, dry sand, earth or proprietary booms/absorbent pads if available. Obtain advice on containment, neutralisation and clean-up from local emergency responders.

**Reference to Other Sections**

Refer to protective measures listed in Sections 8 and 13.

## Section 7 - Handling and Storage

**Precautions for Safe Handling**

Avoid contact with skin, eyes or clothing. Do not breathe mist/vapors/spray. Ensure adequate ventilation.

**Conditions for Safe Storage, Including any Incompatibilities**

Keep container tightly closed. Keep at temperatures between 2°C and 8 °C.

AS/NZS 2243.10:2004, Safety in laboratories - Storage of chemicals

## Section 8 - Exposure Controls and Personal Protection

**Exposure limits**

**NZ** - Workplace Exposure Standards and Biological Exposure Indices (6th edition). New Zealand Department of Labor

**AUS** - Exposure Standards for Atmospheric Contaminants in the Occupational Environment - Guidance Note on the Interpretation of Exposure Standards for Atmospheric Contaminants in the Occupational Environment [NOHSC:3008(1995)]

Adopted National Exposure Standards for Atmospheric Contaminants in the Occupational Environment [NOHSC:1003(1995)] updated in August, 2005. Safe Work Australia

**UK** - EH40/2005 Work Exposure Limits, Fourth edition. Published 2020.

**ACGIH** - Threshold Limit Values - Ceiling (TLV-C) guidelines by the American Conference of Governmental Industrial Hygienists (ACGIH) for controlling worker exposure to airborne chemical concentrations in the workplace.

**DE** - MAK and BAT values of Hazardous Chemical Compounds in the Work Area. Published by German Research Foundation on July 1, 2011

| Component        | Australia                              | New Zealand WEL  | ACGIH TLV                    | The United Kingdom  | Germany  |
|------------------|--|--|------------------------------|---|--|
| Phenol           | TWA: 1 ppm<br>TWA: 4 mg/m <sup>3</sup> | TWA: 1 ppm<br>TWA: 3.8 mg/m <sup>3</sup><br>STEL: 2 ppm<br>STEL: 7.7 mg/m <sup>3</sup><br>Skin | TWA: 5 ppm<br>Skin           | STEL: 4 ppm 15 min<br>STEL: 16 mg/m <sup>3</sup> 15 min<br>TWA: 2 ppm 8 hr<br>TWA: 7.8 mg/m <sup>3</sup> 8 hr<br>Skin | TWA: 2 ppm (8 Stunden). AGW - exposure factor 2<br>TWA: 8 mg/m <sup>3</sup> (8 Stunden). AGW - exposure factor 2<br>Haut |
| Sodium hydroxide | 2 mg/m <sup>3</sup> TWA                | Ceiling: 2 mg/m <sup>3</sup>   | Ceiling: 2 mg/m <sup>3</sup> | 2 mg/m <sup>3</sup> STEL  | 2 mg/m <sup>3</sup> TWA (inhalable fraction)   |

#### Biological limit values

**NZ** - Substances assigned Biological Exposure Indices in the New Zealand Workplace Exposure Standards and Biological Exposure Indices (6th edition). New Zealand Department of Labor

| Component | Australia | New Zealand                            | European Union | United Kingdom | Germany   |
|-----------|-----------|--|----------------|----------------|---|
| Phenol    |           | 100 mg/L (urine) end of shift (Phenol) |                |                | Phenol (after hydrolysis): 120 mg/g Creatinine urine (end of shift) |

#### Exposure Controls

##### Engineering Measures

Ensure adequate ventilation, especially in confined areas.

Wherever possible, engineering control measures such as the isolation or enclosure of the process, the introduction of process or equipment changes to minimise release or contact, and the use of properly designed ventilation systems, should be adopted to control hazardous materials at source

#### Personal protective equipment

##### Eye Protection

Wear safety glasses with side shields (or goggles) (Australian/New Zealand Standard AS/NZS 1337 - Eye protectors for Industrial applications)

##### Hand Protection

Protective gloves

| Glove material    | Breakthrough time                 | Glove thickness | AUS/NZ Standard | Glove comments        |
|-------------------|-----------------------------------|-----------------|-----------------|-----------------------|
| Disposable gloves | See manufacturers recommendations | -               | AS/NZS 2161     | (minimum requirement) |

Inspect gloves before use.

Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves.

(Refer to manufacturer/supplier for information)

Ensure gloves are suitable for the task: Chemical compatibility, Dexterity, Operational conditions, User susceptibility, e.g. sensitisation effects, also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion.

Remove gloves with care avoiding skin contamination.

##### Skin and body protection

Long sleeved clothing

##### Respiratory Protection

Use an AS/NZS 1716 approved respirator if exposure limits are exceeded or if irritation or other symptoms are experienced. To protect the wearer, respiratory protective equipment must be the correct fit and be used and maintained in line with AS/NZS 1715 on the use and maintenance of respiratory protective devices (or AUS/NZ equivalent)  
When RPE is used a face piece Fit Test should be conducted

#### Hygiene Measures

Handle in accordance with good industrial hygiene and safety practice.

#### Environmental exposure controls

No information available.

## Section 9 - Physical and Chemical Properties

### Information on basic physical and chemical properties

|  |                          |  |
|--|--------------------------|--|
| <b>Appearance</b>                              | Amber                    |  |
| <b>Physical State</b>                          | Liquid                   |  |
| <b>Odor</b>                                    | No information available |  |
| <b>Odor Threshold</b>                          | No data available        |  |
| <b>pH</b>                                      | 6.6 - 6.8                |  |
| <b>Melting Point/Range</b>                     | No data available        |  |
| <b>Softening Point</b>                         | No data available        |  |
| <b>Boiling Point/Range</b>                     | Not applicable           |  |
| <b>Flash Point</b>                             | Not applicable           | <b>Method -</b> No information available |
| <b>Evaporation Rate</b>                        | No data available        |  |
| <b>Flammability (solid,gas)</b>                | No information available |  |
| <b>Explosion Limits</b>                        | No data available        |  |
| <b>Vapor Pressure</b>                          | No data available        |  |
| <b>Vapor Density</b>                           | No data available        | (Air = 1.0)                              |
| <b>Specific Gravity / Density</b>              | No data available        |  |
| <b>Bulk Density</b>                            | No data available        |  |
| <b>Water Solubility</b>                        | No information available |  |
| <b>Solubility in other solvents</b>            | No information available |  |
| <b>Partition Coefficient (n-octanol/water)</b> |                          |  |
| <b>Component</b>                               | <b>log Pow</b>           |  |
| Phenol   | 1.5                      |  |
| <b>Autoignition Temperature</b>                | No data available        |  |
| <b>Decomposition Temperature</b>               | No data available        |  |
| <b>Viscosity</b>                               | No data available        |  |
| <b>Explosive Properties</b>                    | No information available |  |
| <b>Oxidizing Properties</b>                    | No information available |  |

### Other information

## Section 10 - Stability and Reactivity

|   |   |
|---|---|
| <b>Reactivity</b>                       | None known, based on information available              |
| <b>Stability</b>                        | Stable under recommended storage conditions.            |
| <b>Conditions to Avoid</b>              | Heat, flames and sparks.                                |
| <b>Incompatible Materials</b>           | No materials to be especially mentioned.                |
| <b>Hazardous Decomposition Products</b> | Hydrogen bromide. Carbon oxides. Nitrogen oxides (NOx). |
| <b>Hazardous Polymerization</b>         | Hazardous polymerization does not occur.                |

## Section 11 - Toxicological Information

### Information on Toxicological Effects

|   |  |
|---|--|
| <b>Product Information</b>                | Product does not present an acute toxicity hazard based on known or supplied information |
| <b>(a) acute toxicity;</b><br><b>Oral</b> | Based on ATE data, the classification criteria are not met                               |

**Dermal  
Inhalation**

Based on ATE data, the classification criteria are not met  
Based on ATE data, the classification criteria are not met

| Component        | LD50 Oral                | LD50 Dermal                  | LC50 Inhalation                          |
|------------------|--------------------------|------------------------------|--|
| Phenol           | LD50 = 340 mg/kg ( Rat ) | LD50 = 630 mg/kg ( Rabbit )  | LC50 = 316 mg/m <sup>3</sup> ( Rat ) 4 h |
| Sodium hydroxide | LD50 = 325 mg/kg ( Rat ) | LD50 = 1350 mg/kg ( Rabbit ) |  |

(b) skin corrosion/irritation; Not classified

(c) serious eye damage/irritation; Not classified

(d) respiratory or skin sensitization;

Respiratory No data available  
Skin No data available

(e) germ cell mutagenicity; Not classified

(f) carcinogenicity; No data available

The table below indicates whether each agency has listed any ingredient as a carcinogen

| Component | Australia | New Zealand | New South Wales | Western Australia | IARC | EU | UK | Germany |
|-----------|-----------|-------------|-----------------|-------------------|------|----|----|---------|
| Phenol    |           |             |                 |                   |      |    |    | Cat. 3B |

(g) reproductive toxicity; No data available

(h) STOT-single exposure; No data available

(i) STOT-repeated exposure; No data available

Target Organs No information available.

(j) aspiration hazard; No data available

Symptoms / effects, both acute and delayed No information available

## Section 12 - Ecological Information

### Ecotoxicity effects

. Contains no substances known to be hazardous to the environment or that are not degradable in waste water treatment plants.

| Component        | Freshwater Fish                                     | Water Flea  | Freshwater Algae  | Microtox   |
|------------------|---|---|---|--|
| Phenol           | 4-7 mg/L LC50 96 h<br>32 mg/L LC50 96 h             | EC50: 10.2 - 15.5 mg/L,<br>48h (Daphnia magna)<br>EC50: 4.24 - 10.7 mg/L,<br>48h Static (Daphnia magna) | EC50: 187 - 279 mg/L,<br>72h static<br>(Desmodesmus subspicatus)<br>EC50: 0.0188 - 0.1044<br>mg/L, 96h static<br>(Pseudokirchneriella subcapitata)<br>EC50: = 46.42 mg/L,<br>96h<br>(Pseudokirchneriella subcapitata) | EC50 21 - 36 mg/L 30 min<br>EC50 = 23.28 mg/L 5 min<br>EC50 = 25.61 mg/L 15 min<br>EC50 = 28.8 mg/L 5 min<br>EC50 = 31.6 mg/L 15 min |
| Sodium hydroxide | LC50: = 45.4 mg/L, 96h static (Oncorhynchus mykiss) | -   | -   | -  |

|  |   |   |  |  |
|--|---|---|--|--|
|  |   |   |  |  |
| <b>Persistence and Degradability</b>   | No information available  |   |  |  |
| <b>Bioaccumulative Potential</b>       | No information available  |   |  |  |
|  |   |   |  |  |
| <b>Component</b>                       | <b>log Pow</b>  | <b>Bioconcentration factor (BCF)</b>    |  |  |
| Phenol                                 | 1.5   | 17.5 dimensionless<br>647 dimensionless |  |  |
| <b>Mobility</b>                        | No information available.   |   |  |  |
| <b>Endocrine Disruptor Information</b> | This product does not contain any known or suspected endocrine disruptors |   |  |  |
| <b>Persistent Organic Pollutant</b>    | This product does not contain any known or suspected substance            |   |  |  |
| <b>Ozone Depletion Potential</b>       | This product does not contain any known or suspected substance            |   |  |  |

## Section 13 - Disposal Considerations

|  |  |
|--|--|
| <b>Waste from Residues/Unused Products</b> | Do not allow into drains or watercourses or dispose of where ground or surface waters may be affected. Wastes, including emptied containers, are controlled wastes and should be disposed of in accordance with all federal, E.P.A., state and local regulations. Assure conformity with all applicable regulations. |
| <b>Contaminated Packaging</b>              | Empty remaining contents. Dispose of in accordance with local regulations. Do not re-use empty containers.   |
| <b>Other Information</b>                   | Chemical wastes should be disposed through a licensed commercial waste collection service.   |

## Section 14 - Transport Information

**IMDG/IMO** Not regulated

**ADG** Not regulated

|                    |                     |
|--------------------|---------------------|
| <b>Component</b>   | <b>Hazchem Code</b> |
| Phenol             | 3X                  |
| 108-95-2 ( <1.0 )  | 2X                  |
| Sodium hydroxide   | 2W                  |
| 1310-73-2 ( <0.5 ) | 2R                  |

**IATA** Not regulated

|                               |                                 |
|-------------------------------|---------------------------------|
| <b>Environmental hazards</b>  | No hazards identified           |
| <b>Special Precautions</b>    | No special precautions required |
| <b>Additional information</b> | None known                      |

## Section 15 - Regulatory Information

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

**National Regulations** Australia

See section 8 for national exposure control parameters.

**Standard for the Uniform Scheduling of Medicines and Poisons**

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

| Component                    | Standard for the Uniform Scheduling of Medicines and Poisons  |
|------------------------------|---|
| Phenol - 108-95-2            | Schedule 2 listed<br>Schedule 4 listed - in preparations for injection<br>Schedule 5 listed - including Cresols and Xylenols and any other homologue of phenol boiling below 220°C; when in animal feed additives; except in preparations containing ≤1% of Phenol and in preparations containing ≤3% of Cresols and Xylenols and any other homologues of Phenols<br>Schedule 6 listed - including Cresols and Xylenols and any other homologue of phenol boiling below 220°C; except when separately specified in these Schedules, or in preparations containing ≤1% of Phenols, and in preparations containing ≤3% of Cresols and Xylenols and other homologues of Phenol |
| Sodium hydroxide - 1310-73-2 | Schedule 5 listed - except its salts and derivatives; in preparations being: solid preparations the pH of which in a 10 g/L aqueous solution is >11.5; liquid or semi-solid preparations the pH of which is >11.5 except in food additive preparations for domestic use<br>Schedule 6 listed - except its salts and derivatives; except: [a] when included in Schedule 5 or Schedule 10, [b] in preparations containing ≤5% of Sodium hydroxide being: [i] solid preparations, the pH of which in a 10 g/L aqueous solution is ≤11.5, or [ii] liquid or semi-solid preparations the pH of which is ≤11.5<br>Schedule 10 listed  |

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

| Component                    | Australian Industrial Chemicals Introduction Scheme (AICIS) | Additional information |
|------------------------------|---|------------------------|
| Phenol - 108-95-2            | Present   | -                      |
| Sodium hydroxide - 1310-73-2 | Present   | -                      |

**Australian - Illicit Drug Precursors/Reagents Substance List**

This product contains one or more substance(s) on the Illicit Drug Precursors/Reagents list. Verify requirements related to using, handling and storing these substances.

**Chemicals of Security Concern**

This product does not contain any substance(s) listed on the voluntary National Code of Practice for Chemicals of Security Concern

| Component                    | Australian - Illicit Drug Precursors/Reagents Substance List | Chemicals of Security Concern |
|------------------------------|--|-------------------------------|
| Sodium hydroxide - 1310-73-2 | Category 3   |                               |

**Legend**

Category 3 - Chemicals and apparatus that may be used in the illicit production of drugs. Purchases from this list should alert companies or organizations to seek further indicators of any suspicious orders or enquiries. No official reporting is required for items on this list unless considered warranted

**National pollutant inventory** Subject to reporting requirements

| Component         | National pollutant inventory      |
|-------------------|-----------------------------------|
| Phenol - 108-95-2 | 10 tonne/yr. Threshold category 1 |

**Prohibition or notification/licensing requirements**

Shown below are details of specific prohibition/notifications or licensing requirements when they apply.

This product does not contain any substance(s) subject to Prohibition, Authorization or Restriction.

**International Inventories**

| Component        | AICS | NZIoC | EINECS    | ELINCS | TSCA | DSL | NDSL | PICCS | ENCS | ISHL | IECSC | KECL     |
|------------------|------|-------|-----------|--------|------|-----|------|-------|------|------|-------|----------|
| Phenol           | X    | X     | 203-632-7 | -      | X    | X   | -    | X     | X    | X    | X     | X        |
| Sodium hydroxide | X    | X     | 215-185-5 | -      | X    | X   | -    | X     | X    | X    | X     | KE-31487 |



**Legend:** X - Listed, '-' - Not Listed. **KECL** - NIER number or KE number (<http://ncis.nier.go.kr/en/main.do>)

### International Regulations

**Ozone Depletion Potential** This product does not contain any known or suspected substance

**Persistent Organic Pollutant** This product does not contain any known or suspected substance

**Rotterdam Convention (PIC)** Not applicable

### **Basel convention on the control of transboundary movements of hazardous wastes and their disposal**

Take note that wastes may be subject to export, import, or transit controls pursuant to the Basel convention and/or local regulations implementing the Basel convention.

| Component                    | Basel Convention (Hazardous Waste) | Australian Hazardous Waste Act - Categories of Wastes to Be Controlled |
|------------------------------|------------------------------------|--|
| Phenol - 108-95-2            | Annex I - Y39                      | Y39  |
| Sodium hydroxide - 1310-73-2 | Annex I - Y35                      | Y35 solid or solution  |

| Component        | CAS No    | OECD HPV | Restriction of Hazardous Substances (RoHS) | Seveso III Directive (2012/18/EC) - Qualifying Quantities for Major Accident Notification | Seveso III Directive (2012/18/EC) - Qualifying Quantities for Safety Report Requirements |
|------------------|-----------|----------|--|---|--|
| Phenol           | 108-95-2  | Listed   | Not applicable                             | Not applicable  | Not applicable   |
| Sodium hydroxide | 1310-73-2 | Listed   | Not applicable                             | Not applicable  | Not applicable   |

### **Authorisation/Restrictions according to EU REACH**

| Component        | REACH (1907/2006) - Annex XIV - Substances Subject to Authorization | REACH (1907/2006) - Annex XVII - Restrictions on Certain Dangerous Substances | REACH Regulation (EC 1907/2006) article 59 - Candidate List of Substances of Very High Concern (SVHC) |
|------------------|---|---|---|
| Phenol           | -   | Use restricted. See item 75. (see link for restriction details)               | -   |
| Sodium hydroxide | -   | Use restricted. See item 75. (see link for restriction details)               | -   |

<https://echa.europa.eu/substances-restricted-under-reach>

## **Section 16 - Other Information**

### Legend

**AICS** - Australian Inventory of Chemical Substances  
**TSCA** - United States Toxic Substances Control Act Section 8(b) Inventory  
**DSL/NDL** - Canadian Domestic Substances List/Non-Domestic Substances List  
**IECSC** - Chinese Inventory of Existing Chemical Substances  
**PICCS** - Philippines Inventory of Chemicals and Chemical Substances  
**TWA** - Time Weighted Average  
**IARC** - International Agency for Research on Cancer  
**ICAO/IATA** - International Civil Aviation Organization/International Air Transport Association  
**MARPOL** - International Convention for the Prevention of Pollution from

**NZIoC** - New Zealand Inventory of Chemicals  
**EINECS/ELINCS** - European Inventory of Existing Commercial Chemical Substances/EU List of Notified Chemical Substances  
**ENCS** - Japanese Existing and New Chemical Substances  
**KECL** - Korean Existing and Evaluated Chemical Substances  
**CAS** - Chemical Abstracts Service  
**ACGIH** - American Conference of Governmental Industrial Hygienists Predicted No Effect Concentration (PNEC)  
**IMO/IMDG** - International Maritime Organization/International Maritime Dangerous Goods Code

Ships

**NZS 5433:2020** - Transport of Dangerous Goods on Land

**LD50** - Lethal Dose 50%

**EC50** - Effective Concentration 50%

**WEL** - Workplace Exposure Limit

**DNEL** - Derived No Effect Level

**POW** - Partition coefficient Octanol:Water

**vPvB** - very Persistent, very Bioaccumulative

**VOC** - (Volatile Organic Compound)

**ADG** - Australian Code for the Transport of Dangerous Goods by Road and Rail

**OECD** - Organisation for Economic Co-operation and Development

**LC50** - Lethal Concentration 50%

**ATE** - Acute Toxicity Estimate

**RPE** - Respiratory Protective Equipment

**NOEC** - No Observed Effect Concentration

**BCF** - Bioconcentration factor

**PBT** - Persistent, Bioaccumulative, Toxic

**Key literature references and sources for data**

<https://echa.europa.eu/information-on-chemicals>

Suppliers safety data sheet, Chemadvisor - LOLI, Merck index, RTECS

**Training Advice**

Chemical hazard awareness training, incorporating labelling, Safety Data Sheets (SDS), Personal Protective Equipment (PPE) and hygiene.

**Revision Date**

30-Jun-2023

**Revision Summary**

Update to CLP Format.

**This Safety Data Sheet (SDS) is prepared in accordance to and complies with the requirements of Safe Work Australia - Work Health and Safety Regulations (WHS Regulations).**

**Disclaimer**

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The 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, unless specified in the text

**End of Safety Data Sheet**