

## Wavol Cold Wave

Amcos Pty Ltd

Chemwatch Hazard Alert Code: 2

Chemwatch: 7115-21

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Safety Data Sheet according to WHS and ADG requirements

S.GHS.AUS.EN

### SECTION 1 IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

#### Product Identifier

|                               |                 |
|-------------------------------|-----------------|
| Product name                  | Wavol Cold Wave |
| Other means of identification | Not Available   |

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

|                          |  |
|--------------------------|--|
| Relevant identified uses | SDS are intended for use in the workplace. For domestic-use products, refer to consumer labels.<br>Alkaline perm solution for normal healthy hair. |
|--------------------------|--|

#### Details of the supplier of the safety data sheet

|                         |   |
|-------------------------|---|
| Registered company name | Amcos Pty Ltd   |
| Address                 | Building 3, 129 Long Street Smithfield NSW 2164 Australia |
| Telephone               | +61 2 9725 4220   |
| Fax                     | +61 2 9725 5904   |
| Website                 | https://wavol.com.au/                                     |
| Email                   | Margaret@wavol.com.au                                     |

#### Emergency telephone number

|                                   |                                   |
|-----------------------------------|-----------------------------------|
| Association / Organisation        | Not Available                     |
| Emergency telephone numbers       | 02 97254220 Mon-Fri 7-30am to 4pm |
| Other emergency telephone numbers | Not Available                     |

### SECTION 2 HAZARDS IDENTIFICATION

#### Classification of the substance or mixture


**HAZARDOUS CHEMICAL. NON-DANGEROUS GOODS.** According to the WHS Regulations and the ADG Code.

#### CHEMWATCH HAZARD RATINGS

|              | Min | Max |              |
|--------------|-----|-----|--------------|
| Flammability | 0   |     |              |
| Toxicity     | 2   |     | 0 = Minimum  |
| Body Contact | 2   |     | 1 = Low      |
| Reactivity   | 0   |     | 2 = Moderate |
| Chronic      | 2   |     | 3 = High     |
|              |     |     | 4 = Extreme  |

|                               |  |
|-------------------------------|--|
| Poisons Schedule              | S6   |
| Classification <sup>[1]</sup> | Acute Toxicity (Oral) Category 4, Skin Sensitizer Category 1   |
| Legend:                       | 1. Classified by Chemwatch; 2. Classification drawn from HSIS ; 3. Classification drawn from EC Directive 1272/2008 - Annex VI |

#### Label elements

|                     |   |
|---------------------|---|
| Hazard pictogram(s) |  |
|---------------------|---|

|             |                |
|-------------|----------------|
| SIGNAL WORD | <b>WARNING</b> |
|-------------|----------------|

#### Hazard statement(s)

|      |                                      |
|------|--------------------------------------|
| H302 | Harmful if swallowed.                |
| H317 | May cause an allergic skin reaction. |

#### Precautionary statement(s) Prevention

|      |  |
|------|--|
| P280 | Wear protective gloves/protective clothing/eye protection/face protection. |
| P261 | Avoid breathing mist/vapours/spray.  |
| P270 | Do not eat, drink or smoke when using this product.                        |
| P272 | Contaminated work clothing should not be allowed out of the workplace.     |

**Precautionary statement(s) Response**

|           |  |
|-----------|--|
| P363      | Wash contaminated clothing before reuse.                                   |
| P302+P352 | IF ON SKIN: Wash with plenty of soap and water.                            |
| P333+P313 | If skin irritation or rash occurs: Get medical advice/attention.           |
| P301+P312 | IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell. |

**Precautionary statement(s) Storage**

Not Applicable

**Precautionary statement(s) Disposal**

|      |   |
|------|---|
| P501 | Dispose of contents/container in accordance with local regulations. |
|------|---|

**SECTION 3 COMPOSITION / INFORMATION ON INGREDIENTS****Substances**

See section below for composition of Mixtures

**Mixtures**

| CAS No        | %[weight] | Name                                       |
|---------------|-----------|--|
| 5421-46-5     | 1-19      | <u>ammonium thioglycolate</u>              |
| 141-43-5      | 1-10      | <u>monoethanolamine</u>                    |
| Not Available | 30-60     | Ingredients determined not to be hazardous |

**SECTION 4 FIRST AID MEASURES****Description of first aid measures**

|                     |   |
|---------------------|---|
| <b>Eye Contact</b>  | <ul style="list-style-type: none"> <li>▶ If in eyes, hold eyelids apart and flush the eye continuously with running water.</li> <li>▶ Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes.</li> <li>▶ Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.</li> <li>▶ Seek medical attention without delay; if pain persists or recurs seek medical attention.</li> <li>▶ Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.</li> </ul>   |
| <b>Skin Contact</b> | <p>If skin contact occurs:</p> <ul style="list-style-type: none"> <li>▶ Immediately remove all contaminated clothing, including footwear.</li> <li>▶ Flush skin and hair with running water (and soap if available).</li> <li>▶ Seek medical attention in event of irritation.</li> </ul>   |
| <b>Inhalation</b>   | <ul style="list-style-type: none"> <li>▶ If fumes, aerosols or combustion products are inhaled remove from contaminated area.</li> <li>▶ Other measures are usually unnecessary.</li> </ul>   |
| <b>Ingestion</b>    | <ul style="list-style-type: none"> <li>▶ <b>IF SWALLOWED, REFER FOR MEDICAL ATTENTION, WHERE POSSIBLE, WITHOUT DELAY.</b></li> <li>▶ For advice, contact a Poisons Information Centre or a doctor.</li> <li>▶ Urgent hospital treatment is likely to be needed.</li> <li>▶ In the mean time, qualified first-aid personnel should treat the patient following observation and employing supportive measures as indicated by the patient's condition.</li> <li>▶ If the services of a medical officer or medical doctor are readily available, the patient should be placed in his/her care and a copy of the SDS should be provided. Further action will be the responsibility of the medical specialist.</li> <li>▶ If medical attention is not available on the worksite or surroundings send the patient to a hospital together with a copy of the SDS.</li> </ul> <p><b>Where medical attention is not immediately available or where the patient is more than 15 minutes from a hospital or unless instructed otherwise:</b></p> <ul style="list-style-type: none"> <li>▶ <b>INDUCE</b> vomiting with fingers down the back of the throat, <b>ONLY IF CONSCIOUS</b>. Lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration.</li> </ul> <p><b>NOTE:</b> Wear a protective glove when inducing vomiting by mechanical means.</p> |

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

Treat symptomatically.

**SECTION 5 FIREFIGHTING MEASURES****Extinguishing media**

The product contains a substantial proportion of water, therefore there are no restrictions on the type of extinguishing media which may be used. Choice of extinguishing media should take into account surrounding areas.

Though the material is non-combustible, evaporation of water from the mixture, caused by the heat of nearby fire, may produce floating layers of combustible substances.

In such an event consider:

- ▶ foam.

**Special hazards arising from the substrate or mixture**

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|                                |   |
|--------------------------------|---|
| <b>Fire Incompatibility</b>    | None known.   |
| <b>Advice for firefighters</b> |   |
| <b>Fire Fighting</b>           | <ul style="list-style-type: none"> <li>▶ Alert Fire Brigade and tell them location and nature of hazard.</li> <li>▶ Wear breathing apparatus plus protective gloves in the event of a fire.</li> <li>▶ Prevent, by any means available, spillage from entering drains or water courses.</li> <li>▶ Use fire fighting procedures suitable for surrounding area.</li> </ul>   |
| <b>Fire/Explosion Hazard</b>   | <ul style="list-style-type: none"> <li>▶ The material is not readily combustible under normal conditions.</li> <li>▶ However, it will break down under fire conditions and the organic component may burn.</li> <li>▶ Not considered to be a significant fire risk.</li> <li>▶ Heat may cause expansion or decomposition with violent rupture of containers.</li> </ul> <p>Decomposes on heating and produces toxic fumes of:</p> <ul style="list-style-type: none"> <li>, carbon dioxide (CO<sub>2</sub>)</li> <li>, nitrogen oxides (NO<sub>x</sub>)</li> <li>, sulfur oxides (SO<sub>x</sub>)</li> <li>, other pyrolysis products typical of burning organic material.</li> </ul> <p>May emit poisonous fumes.<br/>May emit corrosive fumes.</p> |
| <b>HAZCHEM</b>                 | Not Applicable  |

## SECTION 6 ACCIDENTAL RELEASE MEASURES

### Personal precautions, protective equipment and emergency procedures

See section 8

### Environmental precautions

See section 12

### Methods and material for containment and cleaning up

|                     |   |
|---------------------|---|
| <b>Minor Spills</b> | <ul style="list-style-type: none"> <li>▶ Clean up all spills immediately.</li> <li>▶ Avoid breathing vapours and contact with skin and eyes.</li> <li>▶ Control personal contact with the substance, by using protective equipment.</li> <li>▶ Contain and absorb spill with sand, earth, inert material or vermiculite.</li> </ul> |
| <b>Major Spills</b> | <p>Moderate hazard.</p> <ul style="list-style-type: none"> <li>▶ Clear area of personnel and move upwind.</li> <li>▶ Alert Fire Brigade and tell them location and nature of hazard.</li> <li>▶ Wear breathing apparatus plus protective gloves.</li> </ul>   |

Personal Protective Equipment advice is contained in Section 8 of the SDS.

## SECTION 7 HANDLING AND STORAGE

### Precautions for safe handling

|                          |   |
|--------------------------|---|
| <b>Safe handling</b>     | <ul style="list-style-type: none"> <li>▶ <b>DO NOT allow clothing wet with material to stay in contact with skin</b></li> <li>▶ Avoid all personal contact, including inhalation.</li> <li>▶ Wear protective clothing when risk of exposure occurs.</li> <li>▶ Use in a well-ventilated area.</li> <li>▶ Prevent concentration in hollows and sumps.</li> </ul> |
| <b>Other information</b> | <ul style="list-style-type: none"> <li>▶ Store in original containers.</li> <li>▶ Keep containers securely sealed.</li> <li>▶ Store in a cool, dry, well-ventilated area.</li> <li>▶ Store away from incompatible materials and foodstuff containers.</li> </ul>  |

### Conditions for safe storage, including any incompatibilities

|                                |   |
|--------------------------------|---|
| <b>Suitable container</b>      | <ul style="list-style-type: none"> <li>▶ Polyethylene or polypropylene container.</li> <li>▶ Packing as recommended by manufacturer.</li> <li>▶ Check all containers are clearly labelled and free from leaks.</li> </ul> |
| <b>Storage incompatibility</b> | <ul style="list-style-type: none"> <li>▶ Avoid strong acids, acid chlorides, acid anhydrides and chloroformates.</li> </ul>   |

## SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

### Control parameters

#### OCCUPATIONAL EXPOSURE LIMITS (OEL)

#### INGREDIENT DATA

| Source                       | Ingredient       | Material name | TWA                           | STEL                         | Peak          | Notes         |
|------------------------------|------------------|---------------|-------------------------------|------------------------------|---------------|---------------|
| Australia Exposure Standards | monoethanolamine | Ethanolamine  | 7.5 mg/m <sup>3</sup> / 3 ppm | 15 mg/m <sup>3</sup> / 6 ppm | Not Available | Not Available |

#### EMERGENCY LIMITS

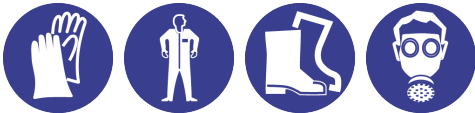
| Ingredient | Material name | TEEL-1 | TEEL-2 | TEEL-3 |
|------------|---------------|--------|--------|--------|
|            |               |        |        |        |

Continued...

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| Ingredient                                 | Original IDLH | Revised IDLH  |
|--|---------------|---------------|
| ammonium thioglycolate                     | Not Available | Not Available |
| monoethanolamine                           | 30 ppm        | Not Available |
| Ingredients determined not to be hazardous | Not Available | Not Available |

## Exposure controls

|   |   |
|---|---|
| <b>Appropriate engineering controls</b> | <p>Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection.</p> <p>The basic types of engineering controls are:</p> <p>Process controls which involve changing the way a job activity or process is done to reduce the risk.</p> <p>Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment.</p>  |
| <b>Personal protection</b>              |    |
| <b>Eye and face protection</b>          | <ul style="list-style-type: none"> <li>Safety glasses with side shields.</li> <li>Chemical goggles.</li> <li>Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task.</li> </ul>   |
| <b>Skin protection</b>                  | See Hand protection below   |
| <b>Hands/feet protection</b>            | <ul style="list-style-type: none"> <li>Wear chemical protective gloves, e.g. PVC.</li> <li>Wear safety footwear or safety gumboots, e.g. Rubber</li> </ul> <p><b>NOTE:</b></p> <ul style="list-style-type: none"> <li>The material may produce skin sensitisation in predisposed individuals. Care must be taken, when removing gloves and other protective equipment, to avoid all possible skin contact.</li> <li>Contaminated leather items, such as shoes, belts and watch-bands should be removed and destroyed.</li> </ul> <p>The selection of suitable gloves does not only depend on the material, but also on further marks of quality which vary from manufacturer to manufacturer. Where the chemical is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.</p> <p>The exact break through time for substances has to be obtained from the manufacturer of the protective gloves and has to be observed when making a final choice.</p> <p>Personal hygiene is a key element of effective hand care.</p> |
| <b>Body protection</b>                  | See Other protection below  |
| <b>Other protection</b>                 | <ul style="list-style-type: none"> <li>Overalls.</li> <li>P.V.C. apron.</li> <li>Barrier cream.</li> </ul>  |
| <b>Thermal hazards</b>                  | Not Available   |

## Recommended material(s)

## GLOVE SELECTION INDEX

Glove selection is based on a modified presentation of the:

"Forsberg Clothing Performance Index".

The effect(s) of the following substance(s) are taken into account in the **computer-generated** selection:

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| Material         | CPI |
|------------------|-----|
| BUTYL            | C   |
| BUTYL/NEOPRENE   | C   |
| HYPALON          | C   |
| NATURAL RUBBER   | C   |
| NATURAL+NEOPRENE | C   |
| NEOPRENE         | C   |
| NEOPRENE/NATURAL | C   |
| NITRILE          | C   |
| NITRILE+PVC      | C   |
| PVA              | C   |
| PVC              | C   |
| VITON            | C   |

\* CPI - Chemwatch Performance Index

A: Best Selection

B: Satisfactory; may degrade after 4 hours continuous immersion

C: Poor to Dangerous Choice for other than short term immersion

**NOTE:** As a series of factors will influence the actual performance of the glove, a final selection must be based on detailed observation. -

\* Where the glove is to be used on a short term, casual or infrequent basis, factors such as "feel" or convenience (e.g. disposability), may dictate a choice of gloves which might otherwise

## Respiratory protection

Type ABK-P Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent)

Where the concentration of gas/particulates in the breathing zone, approaches or exceeds the "Exposure Standard" (or ES), respiratory protection is required.

Degree of protection varies with both face-piece and Class of filter; the nature of protection varies with Type of filter.

| Required Minimum Protection Factor | Half-Face Respirator | Full-Face Respirator | Powered Air Respirator    |
|------------------------------------|----------------------|----------------------|---------------------------|
| up to 10 x ES                      | ABK-AUS P2           | -                    | ABK-PAPR-AUS / Class 1 P2 |
| up to 50 x ES                      | -                    | ABK-AUS / Class 1 P2 | -                         |
| up to 100 x ES                     | -                    | ABK-2 P2             | ABK-PAPR-2 P2 ^           |

^ - Full-face

A(All classes) = Organic vapours, B AUS or B1 = Acid gasses, B2 = Acid gas or hydrogen cyanide(HCN), B3 = Acid gas or hydrogen cyanide(HCN), E = Sulfur dioxide(SO2), G = Agricultural chemicals, K = Ammonia(NH3), Hg = Mercury, NO = Oxides of nitrogen, MB = Methyl bromide, AX = Low boiling point organic compounds(below 65 degC)

Cartridge respirators should never be used for emergency ingress or in areas of unknown vapour concentrations or oxygen content. The wearer must be warned to leave the contaminated area immediately on detecting any odours through the respirator. The odour may indicate that the mask is not functioning properly, that the vapour concentration is too high, or that the mask is not properly fitted. Because of these limitations, only restricted use of cartridge respirators is considered appropriate.

be unsuitable following long-term or frequent use. A qualified practitioner should be consulted.

## SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

### Information on basic physical and chemical properties

|   |  |  |                |
|---|--|--|----------------|
| <b>Appearance</b>                                   | Cloudy pink alkaline liquid with fruity perfume odour; mixes with water. |  |                |
| <b>Physical state</b>                               | Liquid   | <b>Relative density (Water = 1)</b>            | 0.90-1.00      |
| <b>Odour</b>  | Not Available  | <b>Partition coefficient n-octanol / water</b> | Not Available  |
| <b>Odour threshold</b>                              | Not Available  | <b>Auto-ignition temperature (°C)</b>          | Not Available  |
| <b>pH (as supplied)</b>                             | 9.7  | <b>Decomposition temperature</b>               | Not Available  |
| <b>Melting point / freezing point (°C)</b>          | Not Applicable   | <b>Viscosity (cSt)</b>                         | Not Available  |
| <b>Initial boiling point and boiling range (°C)</b> | Not Available  | <b>Molecular weight (g/mol)</b>                | Not Applicable |
| <b>Flash point (°C)</b>                             | Not Available  | <b>Taste</b>                                   | Not Available  |
| <b>Evaporation rate</b>                             | Not Available  | <b>Explosive properties</b>                    | Not Available  |
| <b>Flammability</b>                                 | Not Available  | <b>Oxidising properties</b>                    | Not Available  |
| <b>Upper Explosive Limit (%)</b>                    | Not Available  | <b>Surface Tension (dyn/cm or mN/m)</b>        | Not Available  |
| <b>Lower Explosive Limit (%)</b>                    | Not Available  | <b>Volatile Component (%vol)</b>               | >90            |
| <b>Vapour pressure (kPa)</b>                        | 13.33 @ 27C  | <b>Gas group</b>                               | Not Available  |
| <b>Solubility in water (g/L)</b>                    | Miscible   | <b>pH as a solution (1%)</b>                   | Not Applicable |
| <b>Vapour density (Air = 1)</b>                     | Not Available  | <b>VOC g/L</b>                                 | Not Available  |

## SECTION 10 STABILITY AND REACTIVITY

|   |  |
|---|--|
| <b>Reactivity</b>                         | See section 7  |
| <b>Chemical stability</b>                 | <ul style="list-style-type: none"> <li>▶ Unstable in the presence of incompatible materials.</li> <li>▶ Product is considered stable.</li> <li>▶ Hazardous polymerisation will not occur.</li> </ul> |
| <b>Possibility of hazardous reactions</b> | See section 7  |
| <b>Conditions to avoid</b>                | See section 7  |
| <b>Incompatible materials</b>             | See section 7  |
| <b>Hazardous decomposition products</b>   | See section 5  |

## SECTION 11 TOXICOLOGICAL INFORMATION

### Information on toxicological effects

|                     |   |
|---------------------|---|
| <b>Inhaled</b>      | There is some evidence to suggest that the material can cause respiratory irritation in some persons. The body's response to such irritation can cause further lung damage.<br>Not normally a hazard due to non-volatile nature of product  |
| <b>Ingestion</b>    | Accidental ingestion of the material may be harmful; animal experiments indicate that ingestion of less than 150 gram may be fatal or may produce serious damage to the health of the individual.   |
| <b>Skin Contact</b> | The material may cause severe skin irritation after prolonged or repeated exposure and may produce on contact skin redness, swelling, the production of vesicles, scaling and thickening of the skin. Repeated exposures may produce severe ulceration.<br>Open cuts, abraded or irritated skin should not be exposed to this material<br>Entry into the blood-stream, through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected. |
| <b>Eye</b>          | The material may produce severe irritation to the eye causing pronounced inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.  |
| <b>Chronic</b>      | Principal routes of exposure are by accidental skin and eye contact and by inhalation of vapours especially at higher temperatures.<br>Chronic occupational exposure to thioglycolate salts has produced allergic reactions such as collection of fluid under the skin, burning of the skin, reddening and haemorrhage under skin surface, eczema like dermatitis of the scalp or hands and bleeding under the skin.  |

|                               |   |                                    |
|-------------------------------|---|------------------------------------|
| <b>Wavol Cold Wave</b>        | <b>TOXICITY</b>                                 | <b>IRRITATION</b>                  |
|                               | Not Available                                   | Not Available                      |
| <b>ammonium thioglycolate</b> | <b>TOXICITY</b>                                 | <b>IRRITATION</b>                  |
|                               | Oral (rat) LD50: 25-200 mg/kg <sup>[1]</sup>    | Not Available                      |
| <b>monoethanolamine</b>       | <b>TOXICITY</b>                                 | <b>IRRITATION</b>                  |
|                               | Dermal (rabbit) LD50: 1000 mg/kg <sup>[2]</sup> | Eye (rabbit): 0.76 mg - SEVERE     |
|                               | Oral (rat) LD50: 1510 mg/kg <sup>[2]</sup>      | Skin (rabbit):505 mg open-moderate |

## Wavol Cold Wave

**Legend:** 1. Value obtained from Europe ECHA Registered Substances - Acute toxicity 2.\* Value obtained from manufacturer's SDS. Unless otherwise specified data extracted from RTECS - Register of Toxic Effect of chemical Substances

**AMMONIUM THIOGLYCOLATE**

The following information refers to contact allergens as a group and may not be specific to this product. Contact allergies quickly manifest themselves as contact eczema, more rarely as urticaria or Quincke's oedema. The pathogenesis of contact eczema involves a cell-mediated (T lymphocytes) immune reaction of the delayed type. Other allergic skin reactions, e.g. contact urticaria, involve antibody-mediated immune reactions. Asthma-like symptoms may continue for months or even years after exposure to the material ends. This may be due to a non-allergic condition known as reactive airways dysfunction syndrome (RADS) which can occur after exposure to high levels of highly irritating compound. Main criteria for diagnosing RADS include the absence of previous airways disease in a non-atopic individual, with sudden onset of persistent asthma-like symptoms within minutes to hours of a documented exposure to the irritant. Other criteria for diagnosis of RADS include a reversible airflow pattern on lung function tests, moderate to severe bronchial hyperreactivity on methacholine challenge testing, and the lack of minimal lymphocytic inflammation, without eosinophilia. Ammonium and glyceryl thioglycolate and thioglycolic acid are used mainly in cosmetic permanent waving lotions. At concentrations used, these cosmetic ingredients are only slightly toxic in acute exposures by mouth and skin contact. In repeated skin tests for extended periods of exposure, these ingredients were toxic. Commercial permanent wave products caused temporary redness of the conjunctiva in both rinsed and unrinsed eyes. Somnolence recorded

|                                   |   |                          |   |
|-----------------------------------|---|--------------------------|---|
| Acute Toxicity                    | ✓ | Carcinogenicity          | ⊘ |
| Skin Irritation/Corrosion         | ⊘ | Reproductivity           | ⊘ |
| Serious Eye Damage/Irritation     | ⊘ | STOT - Single Exposure   | ⊘ |
| Respiratory or Skin sensitisation | ✓ | STOT - Repeated Exposure | ⊘ |
| Mutagenicity                      | ⊘ | Aspiration Hazard        | ⊘ |

**Legend:** ✗ – Data available but does not fill the criteria for classification  
 ✓ – Data available to make classification  
 ⊘ – Data Not Available to make classification

**SECTION 12 ECOLOGICAL INFORMATION****Toxicity**

| Wavol Cold Wave | ENDPOINT      | TEST DURATION (HR) | SPECIES       | VALUE         | SOURCE        |
|-----------------|---------------|--------------------|---------------|---------------|---------------|
|                 | Not Available | Not Available      | Not Available | Not Available | Not Available |

| ammonium thioglycolate | ENDPOINT | TEST DURATION (HR) | SPECIES                       | VALUE    | SOURCE |
|------------------------|----------|--------------------|-------------------------------|----------|--------|
|                        | EC50     | 48                 | Crustacea                     | 38mg/L   | 2      |
|                        | EC50     | 72                 | Algae or other aquatic plants | 2.6mg/L  | 2      |
|                        | NOEC     | 72                 | Algae or other aquatic plants | 1.45mg/L | 2      |

| monoethanolamine | ENDPOINT | TEST DURATION (HR) | SPECIES                       | VALUE    | SOURCE |
|------------------|----------|--------------------|-------------------------------|----------|--------|
|                  | LC50     | 96                 | Fish                          | =75mg/L  | 1      |
|                  | EC50     | 48                 | Crustacea                     | =65mg/L  | 1      |
|                  | EC50     | 72                 | Algae or other aquatic plants | =15mg/L  | 1      |
|                  | NOEC     | 504                | Crustacea                     | 0.85mg/L | 2      |

**Legend:** Extracted from 1. IUCLID Toxicity Data 2. Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity 3. EPIWIN Suite V3.12 (QSAR) - Aquatic Toxicity Data (Estimated) 4. US EPA, Ecotox database - Aquatic Toxicity Data 5. ECETOC Aquatic Hazard Assessment Data 6. NITE (Japan) - Bioconcentration Data 7. METI (Japan) - Bioconcentration Data 8. Vendor Data

**DO NOT** discharge into sewer or waterways.

**Persistence and degradability**

| Ingredient             | Persistence: Water/Soil | Persistence: Air |
|------------------------|-------------------------|------------------|
| ammonium thioglycolate | LOW                     | LOW              |
| monoethanolamine       | LOW                     | LOW              |

**Bioaccumulative potential**

| Ingredient             | Bioaccumulation       |
|------------------------|-----------------------|
| ammonium thioglycolate | LOW (LogKOW = 0.0305) |
| monoethanolamine       | LOW (LogKOW = -1.31)  |

**Mobility in soil**

| Ingredient             | Mobility           |
|------------------------|--------------------|
| ammonium thioglycolate | HIGH (KOC = 1.201) |
| monoethanolamine       | HIGH (KOC = 1)     |

## SECTION 13 DISPOSAL CONSIDERATIONS

### Waste treatment methods

|                                     |   |
|-------------------------------------|---|
| <b>Product / Packaging disposal</b> | <ul style="list-style-type: none"> <li>▶ Recycle wherever possible.</li> <li>▶ Consult manufacturer for recycling options or consult local or regional waste management authority for disposal if no suitable treatment or disposal facility can be identified.</li> <li>▶ Dispose of by: burial in a land-fill specifically licensed to accept chemical and / or pharmaceutical wastes or incineration in a licensed apparatus (after admixture with suitable combustible material).</li> <li>▶ Decontaminate empty containers.</li> </ul> |
|-------------------------------------|---|

## SECTION 14 TRANSPORT INFORMATION

### Labels Required

|                         |                |
|-------------------------|----------------|
| <b>Marine Pollutant</b> | NO             |
| <b>HAZCHEM</b>          | Not Applicable |

**Land transport (ADG): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS**

**Air transport (ICAO-IATA / DGR): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS**

**Sea transport (IMDG-Code / GGVSee): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS**

**Transport in bulk according to Annex II of MARPOL and the IBC code**

Not Applicable

## SECTION 15 REGULATORY INFORMATION

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

#### AMMONIUM THIOGLYCOLATE(5421-46-5) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Hazardous Substances Information System - Consolidated Lists      Australia Inventory of Chemical Substances (AICS)

#### MONOETHANOLAMINE(141-43-5) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Exposure Standards      Australia Inventory of Chemical Substances (AICS)  
Australia Hazardous Substances Information System - Consolidated Lists

| National Inventory            | Status   |
|-------------------------------|--|
| Australia - AICS              | Y  |
| Canada - DSL                  | Y  |
| Canada - NDSL                 | N (ammonium thioglycolate; monoethanolamine)   |
| China - IECSC                 | Y  |
| Europe - EINEC / ELINCS / NLP | Y  |
| Japan - ENCS                  | Y  |
| Korea - KECI                  | Y  |
| New Zealand - NZIoC           | Y  |
| Philippines - PICCS           | Y  |
| USA - TSCA                    | Y  |
| <b>Legend:</b>                | Y = All ingredients are on the inventory<br>N = Not determined or one or more ingredients are not on the inventory and are not exempt from listing(see specific ingredients in brackets) |

## SECTION 16 OTHER INFORMATION

### Other information

Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by the Chemwatch Classification committee using available literature references.

The SDS is a Hazard Communication tool and should be used to assist in the Risk Assessment. Many factors determine whether the reported Hazards are Risks in the workplace or other settings. Risks may be determined by reference to Exposures Scenarios. Scale of use, frequency of use and current or available engineering controls must be considered.

### Definitions and abbreviations

PC – TWA: Permissible Concentration-Time Weighted Average  
 PC – STEL: Permissible Concentration-Short Term Exposure Limit  
 IARC: International Agency for Research on Cancer  
 ACGIH: American Conference of Governmental Industrial Hygienists  
 STEL: Short Term Exposure Limit  
 TEEL: Temporary Emergency Exposure Limit,  
 IDLH: Immediately Dangerous to Life or Health Concentrations  
 OSF: Odour Safety Factor  
 NOAEL: No Observed Adverse Effect Level  
 LOAEL: Lowest Observed Adverse Effect Level  
 TLV: Threshold Limit Value  
 LOD: Limit Of Detection  
 OTV: Odour Threshold Value

## Wavol Cold Wave

BCF: BioConcentration Factors  
BEI: Biological Exposure Index

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