

## HR Series NEFA-HR(2) Color A

### Novachem Pty Ltd

Version No: 1.1

Safety Data Sheet according to Work Health and Safety Regulations (Hazardous Chemicals) 2023 and ADG requirements

Chemwatch Hazard Alert Code: 4

Initial Date: 23/12/2025

Revision Date: 22/12/2025

Print Date: 22/12/2025

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## SECTION 1 Identification of the substance / mixture and of the company / undertaking

### Product Identifier

|                                      |                              |
|--------------------------------------|------------------------------|
| <b>Product name</b>                  | HR Series NEFA-HR(2) Color A |
| <b>Synonyms</b>                      | Not Available                |
| <b>Other means of identification</b> | 438-91691                    |

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

|                                 |                             |
|---------------------------------|-----------------------------|
| <b>Relevant identified uses</b> | For In Vitro Diagnostic use |
|---------------------------------|-----------------------------|

### Details of the manufacturer or importer of the safety data sheet

|                                |  |  |
|--------------------------------|--|--|
| <b>Registered company name</b> | <b>Novachem Pty Ltd</b>                                      | <b>Novachem Pty Ltd</b>                                      |
| <b>Address</b>                 | 25 Crissane Road, Heidelberg West Victoria 3081 Australia    | 25 Crissane Road, Heidelberg West Victoria 3081 Australia    |
| <b>Telephone</b>               | +61384151255   | +61384151255   |
| <b>Fax</b>                     | +61386250088   | +61386250088   |
| <b>Website</b>                 | <a href="http://www.novachem.com.au">www.novachem.com.au</a> | <a href="http://www.novachem.com.au">www.novachem.com.au</a> |
| <b>Email</b>                   | novachem@novachem.com.au                                     | novachem@novachem.com.au                                     |

### Emergency telephone number

|  |   |   |
|--|---|---|
| <b>Association / Organisation</b>          | <b>Victorian Poisons Information Centre</b> | <b>Victorian Poisons Information Centre</b> |
| <b>Emergency telephone number(s)</b>       | 13 11 26                                    | 13 11 26                                    |
| <b>Other emergency telephone number(s)</b> | Not Available                               | Not Available                               |

## SECTION 2 Hazards identification

### Classification of the substance or mixture

|                                      |  |
|--------------------------------------|--|
| <b>Poisons Schedule</b>              | Not Applicable   |
| <b>Classification</b> <sup>[1]</sup> | Acute Toxicity (Oral) Category 4, Acute Toxicity (Dermal) Category 3, Skin Corrosion/Irritation Category 2, Serious Eye Damage/Eye Irritation Category 2A, Specific Target Organ Toxicity - Single Exposure Category 1, Hazardous to the Aquatic Environment Acute Hazard Category 3, Hazardous to the Aquatic Environment Long-Term Hazard Category 3 |
| <b>Legend:</b>                       | 1. Classified by Chemwatch; 2. Classification drawn from HCIS; 3. Classification drawn from Regulation (EU) No 1272/2008 - Annex VI  |

### Label elements

|                            |   |
|----------------------------|---|
| <b>Hazard pictogram(s)</b> |   |
| <b>Signal word</b>         | <b>Danger</b>   |

### Hazard statement(s)

|               |  |
|---------------|--|
| <b>H302</b>   | Harmful if swallowed.                              |
| <b>H311</b>   | Toxic in contact with skin.                        |
| <b>H315</b>   | Causes skin irritation.                            |
| <b>H319</b>   | Causes serious eye irritation.                     |
| <b>H370</b>   | Causes damage to organs.                           |
| <b>H412</b>   | Harmful to aquatic life with long lasting effects. |
| <b>AUH032</b> | Contact with acid liberates very toxic gas.        |

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## Precautionary statement(s) Prevention

|      |  |
|------|--|
| P260 | Do not breathe dust/fume.  |
| P280 | Wear protective gloves, protective clothing, eye protection and face protection. |
| P270 | Do not eat, drink or smoke when using this product.                              |
| P264 | Wash all exposed external body areas thoroughly after handling.                  |

## Precautionary statement(s) Response

|                |  |
|----------------|--|
| P308+P311      | IF exposed or concerned: Call a POISON CENTER/doctor/physician/first aider.  |
| P302+P352      | IF ON SKIN: Wash with plenty of 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. |
| P337+P313      | If eye irritation persists: Get medical advice/attention.  |

## Precautionary statement(s) Storage

|      |                  |
|------|------------------|
| P405 | Store locked up. |
|------|------------------|

## Precautionary statement(s) Disposal

|      |  |
|------|--|
| P501 | Dispose of contents/container to authorised hazardous or special waste collection point in accordance with any local regulation. |
|------|--|

No further product hazard information.

## SECTION 3 Composition / information on ingredients

## Substances

See section below for composition of Mixtures

## Mixtures

| CAS No     | %[weight] | Name                     |
|------------|-----------|--------------------------|
| 83-07-8    | <5        | <u>4-aminoantipyrene</u> |
| 7757-82-6  | <5        | <u>sodium sulfate</u>    |
| 26628-22-8 | <1        | <u>sodium azide</u>      |

**Legend:** 1. Classified by Chemwatch; 2. Classification drawn from HCIS; 3. Classification drawn from Regulation (EU) No 1272/2008 - Annex VI; 4. Classification drawn from C&L; \* EU IOELVs available

## SECTION 4 First aid measures

## Description of first aid measures

|                     |  |
|---------------------|--|
| <b>Eye Contact</b>  | <p>If this product comes in contact with the eyes:</p> <ul style="list-style-type: none"> <li>▶ Immediately hold eyelids apart and flush the eye continuously with running water.</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>▶ Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes.</li> <li>▶ Transport to hospital or doctor without delay.</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 or hair contact occurs:</p> <ul style="list-style-type: none"> <li>▶ Immediately flush body and clothes with large amounts of water, using safety shower if available.</li> <li>▶ Quickly remove all contaminated clothing, including footwear.</li> <li>▶ Wash skin and hair with running water. Continue flushing with water until advised to stop by the Poisons Information Centre.</li> <li>▶ Transport to hospital, or doctor.</li> </ul>   |
| <b>Inhalation</b>   | <ul style="list-style-type: none"> <li>▶ If fumes or combustion products are inhaled remove from contaminated area.</li> <li>▶ Lay patient down. Keep warm and rested.</li> <li>▶ Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures.</li> <li>▶ Apply artificial respiration if not breathing, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary.</li> <li>▶ Transport to hospital, or doctor, without delay.</li> </ul>   |
| <b>Ingestion</b>    | <ul style="list-style-type: none"> <li>▶ Immediately give a glass of water.</li> <li>▶ First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor.</li> </ul>  |

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

Treat symptomatically.

## SECTION 5 Firefighting measures

## Extinguishing media

- ▶ There is no restriction on the type of extinguisher which may be used.
- ▶ Use extinguishing media suitable for surrounding area.

## Special hazards arising from the substrate or mixture

|                             |             |
|-----------------------------|-------------|
| <b>Fire Incompatibility</b> | None known. |
|-----------------------------|-------------|

## Advice for firefighters

|                      |  |
|----------------------|--|
| <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> </ul> |
|----------------------|--|

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|                              |   |
|------------------------------|---|
|                              | <ul style="list-style-type: none"> <li>▶ Use fire fighting procedures suitable for surrounding area.</li> </ul>   |
| <b>Fire/Explosion Hazard</b> | <ul style="list-style-type: none"> <li>▶ Non combustible.</li> <li>▶ Not considered a significant fire risk, however containers may burn.</li> </ul> May emit poisonous fumes.<br>May emit corrosive fumes. |
| <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 dust and contact with skin and eyes.</li> <li>▶ Wear protective clothing, gloves, safety glasses and dust respirator.</li> <li>▶ Use dry clean up procedures and avoid generating dust.</li> </ul> |
| <b>Major Spills</b> | Moderate hazard. <ul style="list-style-type: none"> <li>▶ <b>CAUTION:</b> Advise personnel in area.</li> <li>▶ Alert Emergency Services and tell them location and nature of hazard.</li> <li>▶ Control personal contact by wearing protective clothing.</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>▶ Avoid skin 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 area protected from environmental extremes.</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>▶ Check all containers are clearly labelled and free from leaks.</li> </ul> |
| <b>Storage incompatibility</b> | ▶ Avoid strong acids, acid chlorides, acid anhydrides and chloroformates.  |

**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 | sodium azide | Sodium azide  | Not Available | Not Available | 0.11 ppm / 0.3 mg/m <sup>3</sup> | (d) For the two substances marked with this footnote (benomyl and sodium azide), the exposure standards are established as gravimetric (mg/m <sup>3</sup> ) values and converted into volumetric values. |

**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. 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>Individual protection measures, such as personal protective equipment</b> |    |
| <b>Eye and face protection</b>   | <ul style="list-style-type: none"> <li>▶ Safety glasses with side shields.</li> <li>▶ Chemical goggles. [AS/NZS 1337.1, EN166 or national equivalent]</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>   | 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.  |

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|                         |   |
|-------------------------|---|
|                         | <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> <p>Experience indicates that the following polymers are suitable as glove materials for protection against undissolved, dry solids, where abrasive particles are not present.</p> <ul style="list-style-type: none"> <li>▶ polychloroprene.</li> <li>▶ nitrile rubber.</li> <li>▶ butyl rubber.</li> </ul> |
| <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> <li>▶ Skin cleansing cream.</li> </ul>  |

**Respiratory protection**

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

| Required Minimum Protection Factor | Half-Face Respirator | Full-Face Respirator | Powered Air Respirator |
|------------------------------------|----------------------|----------------------|------------------------|
| up to 10 x ES                      | B P1<br>Air-line*    | -<br>-               | B PAPR-P1<br>-         |
| up to 50 x ES                      | Air-line**           | B P2                 | B PAPR-P2              |
| up to 100 x ES                     | -                    | B P3                 | -                      |
|                                    |                      | Air-line*            | -                      |
| 100+ x ES                          | -                    | Air-line**           | B PAPR-P3              |

\* - Negative pressure demand \*\* - Continuous flow

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(SO<sub>2</sub>), G = Agricultural chemicals, K = Ammonia(NH<sub>3</sub>), Hg = Mercury, NO = Oxides of nitrogen, MB = Methyl bromide, AX = Low boiling point organic compounds(below 65 degC)

- Respirators may be necessary when engineering and administrative controls do not adequately prevent exposures.
- The decision to use respiratory protection should be based on professional judgment that takes into account toxicity information, exposure measurement data, and frequency and likelihood of the worker's exposure - ensure users are not subject to high thermal loads which may result in heat stress or distress due to personal protective equipment (powered, positive flow, full face apparatus may be an option).
- Published occupational exposure limits, where they exist, will assist in determining the adequacy of the selected respiratory protection. These may be government mandated or vendor recommended.
- Certified respirators will be useful for protecting workers from inhalation of particulates when properly selected and fit tested as part of a complete respiratory protection program.
- Where protection from nuisance levels of dusts are desired, use type N95 (US) or type P1 (EN143) dust masks. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU)
- Use approved positive flow mask if significant quantities of dust becomes airborne.
- Try to avoid creating dust conditions.

Class P2 particulate filters are used for protection against mechanically and thermally generated particulates or both.

P2 is a respiratory filter rating under various international standards, Filters at least 94% of airborne particles

Suitable for:

- Relatively small particles generated by mechanical processes eg. grinding, cutting, sanding, drilling, sawing.
- Sub-micron thermally generated particles e.g. welding fumes, fertilizer and bushfire smoke.
- Biologically active airborne particles under specified infection control applications e.g. viruses, bacteria, COVID-19, SARS

**SECTION 9 Physical and chemical properties****Information on basic physical and chemical properties**

|   |                             |  |                |
|---|-----------------------------|--|----------------|
| <b>Appearance</b>                                     | Nearly White, lyophilisate. |  |                |
| <b>Physical state</b>                                 | Solid                       | <b>Relative density (Water = 1)</b>                        | Not Available  |
| <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>                               | Not Available               | <b>Decomposition temperature (°C)</b>                      | Not Available  |
| <b>Melting point / freezing point (°C)</b>            | Not Available               | <b>Viscosity (cSt)</b>                                     | Not Available  |
| <b>Initial boiling point and boiling range (°C)</b>   | Not Available               | <b>Molecular weight (g/mol)</b>                            | Not Available  |
| <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 Applicable              | <b>Oxidising properties</b>                                | Not Available  |
| <b>Upper Explosive Limit (%)</b>                      | Not Available               | <b>Surface Tension (dyn/cm or mN/m)</b>                    | Not Applicable |
| <b>Lower Explosive Limit (%)</b>                      | Not Available               | <b>Volatile Component (%vol)</b>                           | Not Available  |
| <b>Vapour pressure (kPa)</b>                          | Not Available               | <b>Gas group</b>   | Not Available  |
| <b>Solubility in water</b>                            | Not Available               | <b>pH as a solution (1%)</b>                               | Not Available  |
| <b>Vapour density (Air = 1)</b>                       | Not Available               | <b>VOC g/L</b>   | Not Available  |
| <b>Heat of Combustion (kJ/g)</b>                      | Not Available               | <b>Ignition Distance (cm)</b>                              | Not Available  |
| <b>Flame Height (cm)</b>                              | Not Available               | <b>Flame Duration (s)</b>                                  | Not Available  |
| <b>Enclosed Space Ignition Time Equivalent (s/m3)</b> | Not Available               | <b>Enclosed Space Ignition Deflagration Density (g/m3)</b> | Not Available  |

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## 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>a) Acute Toxicity</b>                    | There is sufficient evidence to classify this material as acutely toxic.                                   |
| <b>b) Skin Irritation/Corrosion</b>         | There is sufficient evidence to classify this material as skin corrosive or irritating.                    |
| <b>c) Serious Eye Damage/Irritation</b>     | There is sufficient evidence to classify this material as eye damaging or irritating                       |
| <b>d) Respiratory or Skin sensitisation</b> | Based on available data, the classification criteria are not met.  |
| <b>e) Mutagenicity</b>                      | Based on available data, the classification criteria are not met.  |
| <b>f) Carcinogenicity</b>                   | Based on available data, the classification criteria are not met.  |
| <b>g) Reproductivity</b>                    | Based on available data, the classification criteria are not met.  |
| <b>h) STOT - Single Exposure</b>            | There is sufficient evidence to classify this material as toxic to specific organs through single exposure |
| <b>i) STOT - Repeated Exposure</b>          | Based on available data, the classification criteria are not met.  |
| <b>j) Aspiration Hazard</b>                 | Based on available data, the classification criteria are not met.  |

|                     |  |
|---------------------|--|
| <b>Inhaled</b>      | <p>There is strong evidence to suggest that this material can cause, if inhaled once, very serious, irreversible damage of organs. The material is not thought to produce either adverse health effects or irritation of the respiratory tract following inhalation (as classified by EC Directives using animal models). Nevertheless, adverse systemic effects have been produced following exposure of animals by at least one other route and good hygiene practice requires that exposure be kept to a minimum and that suitable control measures be used in an occupational setting.</p> <p>There is strong evidence to suggest that this material, on a single contact with skin, can cause very serious, irreversible damage of organs.</p>            |
| <b>Ingestion</b>    | <p>There is strong evidence to suggest that this material can cause, if swallowed once, very serious, irreversible damage of organs. The material is not thought to produce adverse health effects following ingestion (as classified by EC Directives using animal models). Nevertheless, adverse systemic effects have been produced following exposure of animals by at least one other route and good hygiene practice requires that exposure be kept to a minimum.</p>  |
| <b>Skin Contact</b> | <p>Skin contact with the material may produce toxic effects; systemic effects may result following absorption. This material can cause inflammation of the skin on contact in some persons.</p> <p>There is strong evidence to suggest that this material, on a single contact with skin, can cause very serious, irreversible damage of organs. The material may accentuate any pre-existing dermatitis condition</p> <p>Open cuts, abraded or irritated skin should not be exposed to this material</p> <p>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.</p> |
| <b>Eye</b>          | This material causes serious eye irritation.   |
| <b>Chronic</b>      | Long-term exposure to the product is not thought to produce chronic effects adverse to the health (as classified by EC Directives using animal models); nevertheless exposure by all routes should be minimised as a matter of course.   |

|                                     |   |   |
|-------------------------------------|---|---|
| <b>HR Series NEFA-HR(2) Color A</b> | <b>TOXICITY</b>   | <b>IRRITATION</b>   |
|                                     | Not Available   | Not Available   |
| <b>4-aminoantipyrine</b>            | <b>TOXICITY</b>   | <b>IRRITATION</b>   |
|                                     | Oral (Rat) LD50: 1700 mg/kg <sup>[2]</sup>  | Not Available   |
| <b>sodium sulfate</b>               | <b>TOXICITY</b>   | <b>IRRITATION</b>   |
|                                     | Inhalation (Rat) LC50: >2.4 mg/l4h <sup>[1]</sup><br>Oral (Rat) LD50: >2000 mg/kg <sup>[1]</sup>          | Eye: no adverse effect observed (not irritating) <sup>[1]</sup><br>Skin: no adverse effect observed (not irritating) <sup>[1]</sup> |
| <b>sodium azide</b>                 | <b>TOXICITY</b>   | <b>IRRITATION</b>   |
|                                     | Dermal (rabbit) LD50: 20 mg/kg <sup>[2]</sup><br>Inhalation (Rat) LC50: >0.054<0.52 mg/l4h <sup>[1]</sup> | Eye: no adverse effect observed (not irritating) <sup>[1]</sup><br>Skin: no adverse effect observed (not irritating) <sup>[1]</sup> |
|                                     | Oral (Rat) LD50: 27 mg/kg <sup>[2]</sup>  |   |

**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

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|   |   |                                   |
|---|---|-----------------------------------|
| <b>SODIUM SULFATE</b>                         | Equivocal Tumorigen by RTECS criteria. Reproductive effector in mice.<br>For sodium sulfate:<br>The acute toxicity of sodium sulfate has not been established, but existing data indicate very low acute toxicity. Very high doses cause severe diarrhea. Sodium sulfate is not irritating to the skin, and only slightly irritating to the eyes. It is highly unlikely to cause sensitizing effects.<br>There is no data regarding genetic toxicity except for a single negative test.   |                                   |
| <b>SODIUM AZIDE</b>                           | General anaesthesia, somnolence, convulsions, headache, irritability, arrhythmias, dyspnae, respiratory stimulation, diarrhoea recorded.  |                                   |
| <b>4-AMINOANTIPYRINE &amp; SODIUM SULFATE</b> | 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. |                                   |
| <b>Acute Toxicity</b>                         | ✓   | <b>Carcinogenicity</b> ✗          |
| <b>Skin Irritation/Corrosion</b>              | ✓   | <b>Reproductivity</b> ✗           |
| <b>Serious Eye Damage/Irritation</b>          | ✓   | <b>STOT - Single Exposure</b> ✓   |
| <b>Respiratory or Skin sensitisation</b>      | ✗   | <b>STOT - Repeated Exposure</b> ✗ |
| <b>Mutagenicity</b>                           | ✗   | <b>Aspiration Hazard</b> ✗        |

**Legend:** ✗ – Data either not available or does not fill the criteria for classification  
 ✓ – Data available to make classification

## SECTION 12 Ecological information

## Toxicity

|                                     |                 |                           |                               |                 |               |
|-------------------------------------|-----------------|---------------------------|-------------------------------|-----------------|---------------|
| <b>HR Series NEFA-HR(2) Color A</b> | <b>Endpoint</b> | <b>Test Duration (hr)</b> | <b>Species</b>                | <b>Value</b>    | <b>Source</b> |
|                                     | Not Available   | Not Available             | Not Available                 | Not Available   | Not Available |
| <b>4-aminoantipyrine</b>            | <b>Endpoint</b> | <b>Test Duration (hr)</b> | <b>Species</b>                | <b>Value</b>    | <b>Source</b> |
|                                     | Not Available   | Not Available             | Not Available                 | Not Available   | Not Available |
| <b>sodium sulfate</b>               | <b>Endpoint</b> | <b>Test Duration (hr)</b> | <b>Species</b>                | <b>Value</b>    | <b>Source</b> |
|                                     | EC50            | 72h                       | Algae or other aquatic plants | 1206-1637mg/l   | 4             |
|                                     | EC50            | 48h                       | Crustacea                     | 2564mg/l        | 1             |
|                                     | EC50            | 96h                       | Algae or other aquatic plants | 1562.44mg/L     | 4             |
|                                     | NOEC(ECx)       | 1h                        | Algae or other aquatic plants | 0.011mg/L       | 4             |
| <b>sodium azide</b>                 | <b>Endpoint</b> | <b>Test Duration (hr)</b> | <b>Species</b>                | <b>Value</b>    | <b>Source</b> |
|                                     | LC50            | 96h                       | Fish                          | ca.56-790mg/l   | 1             |
|                                     | NOEC(ECx)       | 168h                      | Crustacea                     | 0.1mg/L         | 2             |
|                                     | EC50            | 48h                       | Crustacea                     | 2.8-6.2mg/l     | 4             |
|                                     | EC50            | 96h                       | Algae or other aquatic plants | 0.242-0.429mg/l | 4             |
| <b>Legend:</b>                      | <b>Endpoint</b> | <b>Test Duration (hr)</b> | <b>Species</b>                | <b>Value</b>    | <b>Source</b> |
|                                     | LC50            | 96h                       | Fish                          | 0.68mg/l        | 2             |
| <b>Legend:</b>                      | <b>Endpoint</b> | <b>Test Duration (hr)</b> | <b>Species</b>                | <b>Value</b>    | <b>Source</b> |
|                                     | ErC50           | 72h                       | Algae or other aquatic plants | 0.35mg/l        | 2             |

Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

Do NOT allow product to come in contact with surface waters or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment wash-waters.

Wastes resulting from use of the product must be disposed of on site or at approved waste sites.

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

## Persistence and degradability

| <b>Ingredient</b> | <b>Persistence: Water/Soil</b> | <b>Persistence: Air</b> |
|-------------------|--------------------------------|-------------------------|
| 4-aminoantipyrine | HIGH                           | HIGH                    |
| sodium sulfate    | HIGH                           | HIGH                    |
| sodium azide      | LOW                            | LOW                     |

## Bioaccumulative potential

| <b>Ingredient</b> | <b>Bioaccumulation</b> |
|-------------------|------------------------|
| 4-aminoantipyrine | LOW (LogKOW = -0.07)   |
| sodium sulfate    | LOW (LogKOW = -2.2)    |
| sodium azide      | LOW (LogKOW = 0.1631)  |

## Mobility in soil

Continued...

## HR Series NEFA-HR(2) Color A

| Ingredient        | Mobility               |
|-------------------|------------------------|
| 4-aminoantipyrine | LOW (Log KOC = 282.9)  |
| sodium sulfate    | LOW (Log KOC = 6.124)  |
| sodium azide      | HIGH (Log KOC = 1.342) |

## SECTION 13 Disposal considerations

## Waste treatment methods

|                                     |   |
|-------------------------------------|---|
| <b>Product / Packaging disposal</b> | <ul style="list-style-type: none"> <li>▶ Containers may still present a chemical hazard/ danger when empty.</li> <li>▶ Return to supplier for reuse/ recycling if possible.</li> </ul> <p>Otherwise:</p> <ul style="list-style-type: none"> <li>▶ If container can not be cleaned sufficiently well to ensure that residuals do not remain or if the container cannot be used to store the same product, then puncture containers, to prevent re-use, and bury at an authorised landfill.</li> <li>▶ Where possible retain label warnings and SDS and observe all notices pertaining to the product.</li> <li>▶ Recycle wherever possible or consult manufacturer for recycling options.</li> <li>▶ Consult State Land Waste Management Authority for disposal.</li> <li>▶ Bury residue in an authorised landfill.</li> <li>▶ Recycle containers if possible, or dispose of in an authorised landfill.</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

## 14.7. Maritime transport in bulk according to IMO instruments

## 14.7.1. Transport in bulk according to Annex II of MARPOL and the IBC code

Not Applicable

## 14.7.2. Transport in bulk in accordance with MARPOL Annex V and the IMSBC Code

| Product name      | Group          |
|-------------------|----------------|
| 4-aminoantipyrine | Not Applicable |
| sodium sulfate    | Not Applicable |
| sodium azide      | Not Applicable |

## 14.7.3. Transport in bulk in accordance with the IGC Code

| Product name      | Ship Type      |
|-------------------|----------------|
| 4-aminoantipyrine | Not Applicable |
| sodium sulfate    | Not Applicable |
| sodium azide      | Not Applicable |

## SECTION 15 Regulatory information

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

## 4-aminoantipyrine is found on the following regulatory lists

Australia Chemicals with non-industrial uses removed from the Australian Inventory of Chemical Substances (old Inventory)

Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 2

Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 4

Australia Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP) - Schedule 5

FEI Equine Prohibited Substances List - Banned Substances

FEI Equine Prohibited Substances List (EPSL)

## sodium sulfate is found on the following regulatory lists

Australian Inventory of Industrial Chemicals (AIIC)

## sodium azide is found on the following regulatory lists

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals

Australian Inventory of Industrial Chemicals (AIIC)

## Additional Regulatory Information

Not Applicable

## National Inventory Status

| National Inventory                | Status |
|-----------------------------------|--------|
| Australia - AIIC / Australia Non- | Yes    |

Continued...

## HR Series NEFA-HR(2) Color A

| National Inventory                                | Status  |
|---|---|
| Industrial Use                                    |   |
| Canada - DSL                                      | Yes   |
| Canada - NDSL                                     | No (4-aminoantipyrine; sodium sulfate; sodium azide)  |
| China - IECSC                                     | Yes   |
| Europe - EINEC / ELINCS / NLP                     | Yes   |
| Japan - ENCS                                      | Yes   |
| Korea - KECI                                      | Yes   |
| New Zealand - NZIoC                               | Yes   |
| Philippines - PICCS                               | Yes   |
| USA - TSCA  | All chemical substances in this product have been designated as TSCA Inventory 'Active'   |
| Taiwan - TCSI                                     | Yes   |
| Mexico - INSQ                                     | Yes   |
| Vietnam - NCI                                     | Yes   |
| Russia - FBEPH                                    | Yes   |
| UAE - Control List (Banned/Restricted Substances) | No (4-aminoantipyrine; sodium sulfate; sodium azide)  |
| <b>Legend:</b>                                    | Yes = All CAS declared ingredients are on the inventory<br>No = One or more of the CAS listed ingredients are not on the inventory. These ingredients may be exempt or will require registration. |

## SECTION 16 Other information

|                      |            |
|----------------------|------------|
| <b>Revision Date</b> | 22/12/2025 |
| <b>Initial Date</b>  | 23/12/2025 |

## Other information

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
- ▶ ES: Exposure Standard
- ▶ 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
- ▶ BCF: BioConcentration Factors
- ▶ BEI: Biological Exposure Index
- ▶ DNEL: Derived No-Effect Level
- ▶ PNEC: Predicted no-effect concentration
- ▶ MARPOL: International Convention for the Prevention of Pollution from Ships
- ▶ IMSBC: International Maritime Solid Bulk Cargoes Code
- ▶ IGC: International Gas Carrier Code
- ▶ IBC: International Bulk Chemical Code
  
- ▶ AIIC: Australian Inventory of Industrial Chemicals
- ▶ DSL: Domestic Substances List
- ▶ NDSL: Non-Domestic Substances List
- ▶ IECSC: Inventory of Existing Chemical Substance in China
- ▶ EINECS: European Inventory of Existing Commercial chemical Substances
- ▶ ELINCS: European List of Notified Chemical Substances
- ▶ NLP: No-Longer Polymers
- ▶ ENCS: Existing and New Chemical Substances Inventory
- ▶ KECI: Korea Existing Chemicals Inventory
- ▶ NZIoC: New Zealand Inventory of Chemicals
- ▶ PICCS: Philippine Inventory of Chemicals and Chemical Substances
- ▶ TSCA: Toxic Substances Control Act
- ▶ TCSI: Taiwan Chemical Substance Inventory
- ▶ INSQ: Inventario Nacional de Sustancias Químicas
- ▶ NCI: National Chemical Inventory
- ▶ FBEPH: Russian Register of Potentially Hazardous Chemical and Biological Substances

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