



# Duron Basecoat Water-based Epoxy Part B

## SAFETY DATA SHEET

Issue Date: **30/01/23**  
S.GHS.AUS.EN

Version No: **3.0**  
Safety Data Sheet according to WHS and ADG requirements

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

#### Product Identifier

|                               |   |
|-------------------------------|---|
| Product name                  | Duron Basecoat Water-based Epoxy Part B |
| Synonyms                      | Not Available                           |
| Other means of identification | Not Available                           |

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

|                          |   |
|--------------------------|---|
| Relevant identified uses | Part B of a Basecoat in a Seamless Coating System |
|--------------------------|---|

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

|                         |   |
|-------------------------|---|
| Registered company name | Duron Pty Ltd                               |
| Address                 | 4 Progress Street Yatala Qld 4207 Australia |
| Telephone               | +61 7 3297 4400                             |
| Fax                     | +61 7 3807 9606                             |

#### Emergency telephone number

|                                   |  |
|-----------------------------------|--|
| Association / Organisation        | Not Available  |
| Emergency telephone numbers       | +61 7 3297 4400 (Duron Technical Manager) business hours |
| Other emergency telephone numbers | Not available  |

### SECTION 2 HAZARDS IDENTIFICATION

#### Classification of the substance or mixture

|                    |   |
|--------------------|---|
| Poisons Schedule   | S5  |
| Classification [1] | Skin Corrosion/Irritation Category 2, Eye Irritation Category 2A, Respiratory Sensitizer Category 1, Skin Sensitizer Category 1 |
| Legend:            | 1. Classified by Duron; 2. Classification drawn from HSIS; 3. Classification drawn from EC Directive 1272/2008 - Annex VI       |

#### Label elements

|                    |  |
|--------------------|--|
| GHS label elements |  |
|--------------------|--|

SIGNAL WORD **DANGER**

#### Hazard statement(s)

|      |  |
|------|--|
| H315 | Causes skin irritation.  |
| H319 | Causes serious eye irritation.   |
| H334 | May cause allergy or asthma symptoms or breathing difficulties if inhaled. |
| H317 | May cause an allergic skin reaction.                                       |

#### Precautionary statement(s) Prevention

|      |  |
|------|--|
| P261 | Avoid breathing mist/vapours/spray.  |
| P280 | Wear protective gloves/protective clothing/eye protection/face protection. |
| P285 | In case of inadequate ventilation wear respiratory protection.             |

Continued...

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|             |  |
|-------------|--|
| <b>P272</b> | Contaminated work clothing should not be allowed out of the workplace. |
|-------------|--|

### Precautionary statement(s) Response

|                  |  |
|------------------|--|
| <b>P304+P340</b> | IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. |
| <b>P342+P311</b> | If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.                  |
| <b>P362</b>      | Take off contaminated clothing and wash before reuse.  |
| <b>P302+P352</b> | IF ON SKIN: Wash with plenty of soap and water.  |

### Precautionary statement(s) Storage

Not Applicable

### Precautionary statement(s) Disposal

|             |   |
|-------------|---|
| <b>P501</b> | 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                                       |
|---------------|-----------|--|
| 112-24-3      | 1-5       | <a href="#">triethylenetetramine</a>       |
| 1477-55-0     | 1-5       | <a href="#">benzene-1,3-dimethanamine</a>  |
| Not Available | >60       | Ingredients determined not to be hazardous |

## 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>▀ Wash out immediately with fresh 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>▀ 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>▀ 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

- ▀ Foam.
- ▀ Dry chemical powder.
- ▀ BCF (where regulations permit).
- ▀ Carbon dioxide.

### 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 full body protective clothing with breathing apparatus.</li> <li>▀ Prevent, by any means available, spillage from entering drains or water course.</li> <li>▀ Use water delivered as a fine spray to control fire and cool adjacent area.</li> </ul> |
| <b>Fire/Explosion Hazard</b> | <ul style="list-style-type: none"> <li>▀ Combustible.</li> <li>▀ Slight fire hazard when exposed to heat or flame.</li> <li>▀ Heating may cause expansion or decomposition leading to violent rupture of containers.</li> <li>▀ On combustion, may emit irritating/ toxic fumes.</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>▮ Remove all ignition sources.</li> <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> </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</b> allow clothing wet with material to stay in contact with skin</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>▮ No smoking, naked lights or ignition sources.</li> <li>▮ Store in a cool, dry, well-ventilated area.</li> </ul>   |

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

|                                |  |
|--------------------------------|--|
| <b>Suitable container</b>      | <ul style="list-style-type: none"> <li>▮ Metal can or drum</li> <li>▮ Packaging as recommended by manufacturer.</li> <li>▮ Check all containers are clearly labelled and free from leaks.</li> </ul> |
| <b>Storage incompatibility</b> | None known   |

**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 | benzene-1,3-dimethanamine | m-Xylene-a,a'-diamine | Not Available | Not Available | 0.1 mg/m3 | Sk    |

**EMERGENCY LIMITS**

| Ingredient           | Material name        | TEEL-1 | TEEL-2 | TEEL-3 |
|----------------------|----------------------|--------|--------|--------|
| triethylenetetramine | Triethylenetetramine | 3 ppm  | 14 ppm | 83 ppm |

| Ingredient                                 | Original IDLH | Revised IDLH  |
|--|---------------|---------------|
| triethylenetetramine                       | Not Available | Not Available |
| benzene-1,3-dimethanamine                  | Not Available | 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>  |

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|                              |   |
|------------------------------|---|
| <b>Skin protection</b>       | See Hand protection below   |
| <b>Hands/feet protection</b> | <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 cannot 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> <ul style="list-style-type: none"> <li>When handling liquid-grade epoxy resins wear chemically protective gloves (e.g nitrile or nitrile-butadiene rubber), boots and aprons.</li> <li><b>DO NOT use cotton or leather (which absorb and concentrate the resin), polyvinyl chloride, rubber or polyethylene gloves (which absorb the resin).</b></li> <li><b>DO NOT use barrier creams containing emulsified fats and oils as these may absorb the resin; silicone-based barrier creams should be reviewed prior to use.</b></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> </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     |
| NAT+NEOPR+NITRILE           | C     |
| NATURAL RUBBER              | C     |
| NEOPRENE                    | C     |
| NITRILE                     | C     |
| PE/EVAL/PE                  | C     |
| PVA                         | C     |
| PVC                         | C     |
| SARANEX-23                  | C     |
| VITON                       | C     |
| ##ethylene glycol monobutyl | ether |

\* CPI – Duron 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 be unsuitable following long-term or frequent use. A qualified practitioner should be consulted.

## Respiratory protection

Type AK-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                      | AK-AUS P3            | -                    | AK-PAPR-AUS / Class 1 P3 |
| up to 50 x ES                      | -                    | AK-AUS / Class 1 P3  | -                        |
| up to 100 x ES                     | -                    | AK-2 P3              | AK-PAPR-2 P3 ^           |

^ - 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(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)

## SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

## Information on basic physical and chemical properties

|   |  |  |                |
|---|--|--|----------------|
| <b>Appearance</b>                                   | White or black colour liquid; not miscible with water. |  |                |
| <b>Physical state</b>                               | Liquid   | <b>Relative density (Water = 1)</b>            | 1.2-1.3        |
| <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 Applicable   | <b>Decomposition temperature</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 Applicable |
| <b>Flash point (°C)</b>                             | <200   | <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  |

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|                           |               |                                  |               |
|---------------------------|---------------|----------------------------------|---------------|
| Upper Explosive Limit (%) | Not Available | Surface Tension (dyn/cm or mN/m) | Not Available |
| Lower Explosive Limit (%) | Not Available | Volatile Component (%vol)        | Not Available |
| Vapour pressure (kPa)     | Not Available | Gas group                        | Not Available |
| Solubility in water (g/L) | Immiscible    | pH as a solution (1%)            | Not Available |
| Vapour density (Air = 1)  | Not Available | VOC g/L                          | Not Available |

## SECTION 10 STABILITY AND REACTIVITY

|                                    |  |
|------------------------------------|--|
| Reactivity                         | See section 7  |
| Chemical stability                 | <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> |
| Possibility of hazardous reactions | See section 7  |
| Conditions to avoid                | See section 7  |
| Incompatible materials             | See section 7  |
| Hazardous decomposition products   | See section 5  |

## SECTION 11 TOXICOLOGICAL INFORMATION

## Information on toxicological effects

|              |   |
|--------------|---|
| Inhaled      | 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.   |
| Ingestion    | The material has <b>NOT</b> been classified by EC Directives or other classification systems as "harmful by ingestion". This is because of the lack of corroborating animal or human evidence.  |
| Skin Contact | This material can cause inflammation of the skin on contact in some persons. The material may accentuate any pre-existing dermatitis condition<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. |
| Eye          | This material can cause eye irritation and damage in some persons.  |
| Chronic      | Inhaling this product is more likely to cause a sensitisation reaction in some persons compared to the general population.<br>Skin contact with the material is more likely to cause a sensitisation reaction in some persons compared to the general population.<br>Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure.   |

|                           |   |                                     |
|---------------------------|---|-------------------------------------|
| Duron Basecoat Part B     | TOXICITY  | IRRITATION                          |
|                           | Not Available                                     | Not Available                       |
| triethylenetetramine      | TOXICITY  | IRRITATION                          |
|                           | Dermal (rabbit) LD50: 805 mg/kg <sup>[2]</sup>    | Eye (rabbit): 20 mg/24 h - moderate |
|                           | Oral (rat) LD50: 2500 mg/kg <sup>[2]</sup>        | Eye (rabbit): 49 mg - SEVERE        |
|                           |   | Skin (rabbit): 490 mg open SEVERE   |
|                           |   | Skin (rabbit): 5 mg/24 SEVERE       |
| benzene-1,3-dimethanamine | TOXICITY  | IRRITATION                          |
|                           | dermal (rat) LD50: >3100 mg/kg <sup>[1]</sup>     | Eye (rabbit): 0.05 mg/24h SEVERE    |
|                           | Inhalation (rat) LC50: 700 ppm/1hr <sup>[2]</sup> | Skin (rabbit): 0.75 mg/24h SEVERE   |
|                           | Oral (rat) LD50: 987 mg/kg <sup>[1]</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

|                           |   |
|---------------------------|---|
| TRIETHYLENETETRAMINE      | <p>Ethylenamines are very reactive and can cause chemical burns, skin rashes and asthma-like symptoms. It is readily absorbed through the skin and may cause eye blindness and irreparable damage. As such, they require careful handling. In general, the low-molecular weight polyamines have been positive in the Ames assay (for genetic damage); however, this is probably due to their ability to chelate copper.</p> <p>For alkyl polyamines:</p> <p>The alkyl polyamines cluster consists of two terminal primary and at least one secondary amine groups and are derivatives of low molecular weight ethylenediamine, propylenediamine or hexanediamine. Toxicity depends on route of exposure. Cluster members have been shown to cause skin irritation or sensitisation, eye irritation and genetic defects, but have not been shown to cause cancer.</p> <p>Triethylenetetramine is a severe irritant to skin and eyes and may induce skin sensitisation. Acute exposure to saturated vapour via inhalation was tolerated without impairment but exposure to aerosol may lead to reversible irritations of the mucous membranes in the airways. Studies done on experimental animals showed that it does not cause cancer or foetal developmental defects.</p> <p>Exposure to the material for prolonged periods may cause physical defects in the developing embryo (teratogenesis).</p> |
| BENZENE-1,3-DIMETHANAMINE | <p>Allergic reactions involving the respiratory tract are usually due to interactions between IgE antibodies and allergens and occur rapidly. Allergic potential of the allergen and period of exposure often determine the severity of symptoms. Some people may be genetically more prone than others, and exposure to other irritants may aggravate symptoms. Allergy causing activity is due to interactions with proteins.</p> <p>Attention should be paid to atopic diathesis, characterised by increased susceptibility to nasal inflammation, asthma and eczema.</p>  |

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|   |   |
|---|---|
|   | <p>Exogenous allergic alveolitis is induced essentially by allergen specific immune-complexes of the IgG type; cell-mediated reactions (T lymphocytes) may be involved. Such allergy is of the delayed type with onset up to four hours following exposure.</p> <p>For benzene-1,3-dimethanamine (m-xylene-alpha,alpha'- diamine)</p> <p>The toxicity via oral administration and inhalation was tissue damage in the digestive and respiratory organs, respectively, which are the first contact sites. The chemical is corrosive to rat and mouse skin and a sensitiser in the guinea pig maximisation test.</p> <p>In the 28-day repeated dose toxicity study [OECD TG 407], the chemical was given to rats by gavage at doses of 0, 10, 40, 150 and 600 mg/kg b.w/day. One male and four females died, and salivation, low locomotor activity and piloerection were noted in the 600 mg/kg group.</p> |
| <b>TRIETHYLENETETRAMINE &amp; BENZENE-1,3-DIMETHANAMINE</b> | <p>The following information refers to contact allergens as a group and may not be specific to this product.</p> <p>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.</p>  |
| <b>TRIETHYLENETETRAMINE &amp; BENZENE-1,3-DIMETHANAMINE</b> | <p>The material may produce severe irritation to the eye causing pronounced inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.</p>   |
| <b>TRIETHYLENETETRAMINE &amp; BENZENE-1,3-DIMETHANAMINE</b> | <p>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.</p>  |
| <b>TRIETHYLENETETRAMINE &amp; BENZENE-1,3-DIMETHANAMINE</b> | <p>Asthma-like symptoms may continue for months or even years after exposure to the material ceases. This may be due to a non-allergenic condition known as reactive airways dysfunction syndrome (RADS) which can occur following exposure to high levels of highly irritating compound. Key criteria for the diagnosis of RADS include the absence of preceding respiratory disease, in a non-atopic individual, with abrupt onset of persistent asthma-like symptoms within minutes to hours of a documented exposure to the irritant. A reversible airflow pattern, on spirometry, with the presence of moderate to severe bronchial hyperreactivity on methacholine challenge testing and the lack of minimal lymphocytic inflammation, without eosinophilia, have also been included in the criteria for diagnosis of RADS.</p>   |

|  |   |                                 |   |
|--|---|---------------------------------|---|
| <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 available but does not fill the criteria for classification  
✔ – Data required to make classification available  
☒ – Data Not Available to make classification

## SECTION 12 ECOLOGICAL INFORMATION

## Toxicity

| Ingredient                | Endpoint | Test Duration (hr) | Species                       | Value       | Source |
|---------------------------|----------|--------------------|-------------------------------|-------------|--------|
| triethylenetetramine      | LC50     | 96                 | Fish                          | 180mg/L     | 1      |
| triethylenetetramine      | EC50     | 48                 | Crustacea                     | 31.1mg/L    | 1      |
| triethylenetetramine      | EC50     | 72                 | Algae or other aquatic plants | 2.5mg/L     | 1      |
| triethylenetetramine      | EC10     | 72                 | Algae or other aquatic plants | 0.67mg/L    | 1      |
| triethylenetetramine      | NOEC     | 72                 | Algae or other aquatic plants | <2.5mg/L    | 1      |
| benzene-1,3-dimethanamine | LC50     | 96                 | Fish                          | 191.854mg/L | 3      |
| benzene-1,3-dimethanamine | EC50     | 96                 | Algae or other aquatic plants | 33.195mg/L  | 3      |

**Legend:**

Extracted from 1. IUCLID Toxicity Data 2. Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity 3. EPIWIN Suite V3.12 - 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 |
|---------------------------|-------------------------|------------------|
| triethylenetetramine      | LOW                     | LOW              |
| benzene-1,3-dimethanamine | HIGH                    | HIGH             |

## Bioaccumulative potential

| Ingredient                | Bioaccumulation        |
|---------------------------|------------------------|
| triethylenetetramine      | LOW (LogKOW = -2.6464) |
| benzene-1,3-dimethanamine | LOW (BCF = 2.7)        |

## Mobility in soil

| Ingredient                | Mobility          |
|---------------------------|-------------------|
| triethylenetetramine      | LOW (KOC = 309.9) |
| benzene-1,3-dimethanamine | LOW (KOC = 914.6) |

## SECTION 13 DISPOSAL CONSIDERATIONS

### Waste treatment methods

|                              |   |
|------------------------------|---|
| Product / Packaging disposal | <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>▀ <b>DO NOT allow wash water from cleaning or process equipment to enter drains.</b></li> <li>▀ It may be necessary to collect all wash water for treatment before disposal.</li> <li>▀ In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first.</li> <li>▀ Where in doubt contact the responsible authority.</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

|                  |                |
|------------------|----------------|
| Marine Pollutant | NO             |
| HAZCHEM          | 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

#### TRIETHYLENETETRAMINE(112-24-3) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Hazardous Substances Information System - Consolidated Lists

Australia Inventory of Chemical Substances (AICS)

#### BENZENE-1,3-DIMETHANAMINE(1477-55-0) IS FOUND ON THE FOLLOWING REGULATORY LISTS

Australia Exposure Standards

Australia Hazardous Substances Information System - Consolidated Lists

Australia Inventory of Chemical Substances (AICS)

| National Inventory            | Status   |
|-------------------------------|--|
| Australia - AICS              | Y  |
| Canada - DSL                  | Y  |
| Canada - NDSL                 | N (triethylenetetramine; benzene-1,3-dimethanamine)  |
| 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 Duron 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  
BCF: BioConcentration Factors  
BEI: Biological Exposure Index

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