



## D-Lead Test Kit Solution 1

### CA Group

Chemwatch: 5388-49

Version No: 4.1

Safety Data Sheet according to WHS Regulations (Hazardous Chemicals) Amendment 2020 and ADG requirements

Chemwatch Hazard Alert Code: 3

Issue Date: 23/12/2022

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S.GHS.AUS.EN.E

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

### Product Identifier

|                               |                            |
|-------------------------------|----------------------------|
| Product name                  | D-Lead Test Kit Solution 1 |
| Chemical Name                 | Not Applicable             |
| Synonyms                      | Not Available              |
| Chemical formula              | Not Applicable             |
| Other means of identification | Not Available              |

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

|                          |                             |
|--------------------------|-----------------------------|
| Relevant identified uses | Detecting presence of lead. |
|--------------------------|-----------------------------|

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

|                         |                                                              |
|-------------------------|--------------------------------------------------------------|
| Registered company name | CA Group                                                     |
| Address                 | 32 Industrial Avenue Thomastown VIC 3074 Australia           |
| Telephone               | +61 3 8301 7100                                              |
| Fax                     | +61 3 9359 4076                                              |
| Website                 | <a href="http://www.cagroup.com.au">www.cagroup.com.au</a>   |
| Email                   | <a href="mailto:info@cagroup.com.au">info@cagroup.com.au</a> |

### Emergency telephone number

|                                   |                                           |
|-----------------------------------|-------------------------------------------|
| Association / Organisation        | (03) 8301 7100                            |
| Emergency telephone numbers       | (03) 8301 7107 (Business hours 9am – 5pm) |
| Other emergency telephone numbers | 0428 904 506 (After Hours)                |

## 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     | 0   |     | 0 = Minimum  |
| Body Contact | 3   |     | 1 = Low      |
| Reactivity   | 1   |     | 2 = Moderate |
| Chronic      | 0   |     | 3 = High     |
|              |     |     | 4 = Extreme  |

|                    |                                                                                                                                     |
|--------------------|-------------------------------------------------------------------------------------------------------------------------------------|
| Poisons Schedule   | Not Applicable                                                                                                                      |
| Classification [1] | Skin Corrosion/Irritation Category 2, Serious Eye Damage/Eye Irritation Category 1                                                  |
| Legend:            | 1. Classified by Chemwatch; 2. Classification drawn from HCIS; 3. Classification drawn from Regulation (EU) No 1272/2008 - Annex VI |

### Label elements

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

**Hazard statement(s)**

|             |                            |
|-------------|----------------------------|
| <b>H315</b> | Causes skin irritation.    |
| <b>H318</b> | Causes serious eye damage. |

**Precautionary statement(s) Prevention**

|             |                                                                                  |
|-------------|----------------------------------------------------------------------------------|
| <b>P280</b> | Wear protective gloves, protective clothing, eye protection and face protection. |
| <b>P264</b> | Wash all exposed external body areas thoroughly after handling.                  |

**Precautionary statement(s) Response**

|                       |                                                                                                                                  |
|-----------------------|----------------------------------------------------------------------------------------------------------------------------------|
| <b>P305+P351+P338</b> | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| <b>P310</b>           | Immediately call a POISON CENTER/doctor/physician/first aider.                                                                   |
| <b>P302+P352</b>      | IF ON SKIN: Wash with plenty of water.                                                                                           |
| <b>P332+P313</b>      | If skin irritation occurs: Get medical advice/attention.                                                                         |
| <b>P362+P364</b>      | Take off contaminated clothing and wash it before reuse.                                                                         |

**Precautionary statement(s) Storage**

Not Applicable

**Precautionary statement(s) Disposal**

Not Applicable

**SECTION 3 Composition / information on ingredients****Substances**

See section below for composition of Mixtures

**Mixtures**

| CAS No                                                                                                                                                                                                      | %[weight] | Name                       |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|----------------------------|
| 64-19-7                                                                                                                                                                                                     | <5        | <u>acetic acid glacial</u> |
| <b>Legend:</b> 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 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 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>▶ If swallowed do <b>NOT</b> induce vomiting.</li> <li>▶ If vomiting occurs, lean patient forward or place on left side (head-down position, if possible) to maintain open airway and prevent aspiration.</li> <li>▶ Observe the patient carefully.</li> <li>▶ Never give liquid to a person showing signs of being sleepy or with reduced awareness; i.e. becoming unconscious.</li> <li>▶ Give water to rinse out mouth, then provide liquid slowly and as much as casualty can comfortably drink.</li> <li>▶ Seek medical advice.</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> | ▶ Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result |
|-----------------------------|------------------------------------------------------------------------------------------------------------------------------------------|

**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> <li>▶ Use fire fighting procedures suitable for surrounding area.</li> <li>▶ <b>DO NOT</b> approach containers suspected to be hot.</li> <li>▶ Cool fire exposed containers with water spray from a protected location.</li> <li>▶ If safe to do so, remove containers from path of fire.</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> Decomposes on heating and produces:<br>carbon dioxide (CO <sub>2</sub> )<br>other pyrolysis products typical of burning organic material.<br>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 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> <li>▶ Wipe up.</li> <li>▶ Place in a suitable, labelled container for waste disposal.</li> </ul>                   |
| <b>Major Spills</b> | Moderate hazard. <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> <li>▶ Prevent, by any means available, spillage from entering drains or water course.</li> <li>▶ Stop leak if safe to do so.</li> <li>▶ Contain spill with sand, earth or vermiculite.</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 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>▶ Avoid contact with moisture.</li> <li>▶ Avoid contact with incompatible materials.</li> <li>▶ <b>When handling, DO NOT eat, drink or smoke.</b></li> <li>▶ Keep containers securely sealed when not in use.</li> <li>▶ <b>DO NOT allow clothing wet with material to stay in contact with skin</b></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> <li>▶ Protect containers against physical damage and check regularly for leaks.</li> <li>▶ Observe manufacturer's storage and handling recommendations contained within this SDS.</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 reaction with oxidising agents</li> <li>▶ Avoid strong acids, bases.</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 | acetic acid glacial | Acetic acid   | 10 ppm / 25 mg/m <sup>3</sup> | 37 mg/m <sup>3</sup> / 15 ppm | Not Available | Not Available |

Continued...

**Emergency Limits**

| Ingredient          | TEEL-1        | TEEL-2        | TEEL-3        |
|---------------------|---------------|---------------|---------------|
| acetic acid glacial | Not Available | Not Available | Not Available |

  

| Ingredient          | Original IDLH | Revised IDLH  |
|---------------------|---------------|---------------|
| acetic acid glacial | 50 ppm        | Not Available |

**Exposure controls**

|                                                                              |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
|------------------------------------------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Appropriate engineering controls</b>                                      | 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.<br>The basic types of engineering controls are:<br>Process controls which involve changing the way a job activity or process is done to reduce the risk.<br>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. Ventilation can remove or dilute an air contaminant if designed properly. The design of a ventilation system must match the particular process and chemical or contaminant in use.<br>Employers may need to use multiple types of controls to prevent employee overexposure. |
| <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. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available. In the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable.</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>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.<br/>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.<br/>Personal hygiene is a key element of effective hand care. Gloves must only be worn on clean hands. After using gloves, hands should be washed and dried thoroughly. Application of a non-perfumed moisturiser is recommended.</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> <li>▶ Skin cleansing cream.</li> <li>▶ Eye wash unit.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |

**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:

D-Lead Test Kit Solution 1

| Material          | CPI |
|-------------------|-----|
| BUTYL             | A   |
| NEOPRENE          | A   |
| NITRILE+PVC       | A   |
| PE                | A   |
| PE/EVAL/PE        | A   |
| PVC               | A   |
| SARANEX-23        | A   |
| TEFLON            | A   |
| BUTYL/NEOPRENE    | B   |
| NATURAL RUBBER    | B   |
| NATURAL+NEOPRENE  | B   |
| NITRILE           | B   |
| NAT+NEOPR+NITRILE | 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. -

**Respiratory protection**

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

^ - 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)

- ▶ 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.
- ▶ Cartridge performance is affected by humidity. Cartridges should be changed after 2 hr of continuous use unless it is determined that the humidity is less than 75%, in which case, cartridges can be used for 4 hr. Used cartridges should be discarded daily, regardless of the length of time used

Continued...

\* 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.

#### Ansell Glove Selection

|                                                  |
|--------------------------------------------------|
| <b>Glove</b> — <i>In order of recommendation</i> |
| AlphaTec® 02-100                                 |
| AlphaTec® Solvex® 37-185                         |
| AlphaTec® 58-008                                 |
| AlphaTec® 58-530B                                |
| AlphaTec® 58-530W                                |
| AlphaTec® 58-735                                 |
| AlphaTec® Solvex® 37-675                         |
| AlphaTec® 79-700                                 |
| AlphaTec® 53-001                                 |
| AlphaTec® 58-005                                 |

## SECTION 9 Physical and chemical properties

### Information on basic physical and chemical properties

|                                                     |                                                                         |                                                |                |
|-----------------------------------------------------|-------------------------------------------------------------------------|------------------------------------------------|----------------|
| <b>Appearance</b>                                   | Clear colourless liquid with apple and vinegar odour; mixes with water. |                                                |                |
| <b>Physical state</b>                               | Liquid                                                                  | <b>Relative density (Water = 1)</b>            | 1              |
| <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 Applicable |
| <b>pH (as supplied)</b>                             | 2.4-2.9                                                                 | <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> | ~100                                                                    | <b>Molecular weight (g/mol)</b>                | Not Applicable |
| <b>Flash point (°C)</b>                             | Not Applicable                                                          | <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 Applicable                                                          | <b>Surface Tension (dyn/cm or mN/m)</b>        | Not Available  |
| <b>Lower Explosive Limit (%)</b>                    | Not Applicable                                                          | <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>                          | Miscible                                                                | <b>pH as a solution (1%)</b>                   | Not Available  |
| <b>Vapour density (Air = 1)</b>                     | <1                                                                      | <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>      | The material can cause respiratory irritation in some persons. The body's response to such irritation can cause further lung damage.                                                                                                                                                                                                                                                                     |
| <b>Ingestion</b>    | 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.                                                                                                                                                                                                           |
| <b>Skin Contact</b> | <p>This material can cause inflammation of the skin on contact in some persons.</p> <p>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</p> |

|                                   |                                                                                                                                                                                                                             |                                    |
|-----------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------|
|                                   | prior to the use of the material and ensure that any external damage is suitably protected.                                                                                                                                 |                                    |
| <b>Eye</b>                        | If applied to the eyes, this material causes severe eye damage.                                                                                                                                                             |                                    |
| <b>Chronic</b>                    | Long-term exposure to respiratory irritants may result in airways disease, involving difficulty breathing and related whole-body problems.                                                                                  |                                    |
| <b>D-Lead Test Kit Solution 1</b> | <b>TOXICITY</b>                                                                                                                                                                                                             | <b>IRRITATION</b>                  |
|                                   | Not Available                                                                                                                                                                                                               | Not Available                      |
| <b>acetic acid glacial</b>        | <b>TOXICITY</b>                                                                                                                                                                                                             | <b>IRRITATION</b>                  |
|                                   | Dermal (rabbit) LD50: 1060 mg/kg <sup>[2]</sup>                                                                                                                                                                             | Eye (rabbit): 0.05mg (open)-SEVERE |
|                                   | Inhalation(Mouse) LC50: 1.405 mg/L4h <sup>[2]</sup>                                                                                                                                                                         | Skin (human):50mg/24hr - mild      |
|                                   | Oral (Rat) LD50: 3310 mg/kg <sup>[2]</sup>                                                                                                                                                                                  | Skin (rabbit):525mg (open)-SEVERE  |
| <b>Legend:</b>                    | 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 |                                    |

|                            |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|----------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>ACETIC ACID GLACIAL</b> | <p>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. RADS (or asthma) following an irritating inhalation is an infrequent disorder with rates related to the concentration of and duration of exposure to the irritating substance. On the other hand, industrial bronchitis is a disorder that occurs as a result of exposure due to high concentrations of irritating substance (often particles) and is completely reversible after exposure ceases. The disorder is characterized by difficulty breathing, cough and mucus production.</p> <p>For acid mists, aerosols, vapours</p> <p>Test results suggest that eukaryotic cells are susceptible to genetic damage when the pH falls to about 6.5. Cells from the respiratory tract have not been examined in this respect. Mucous secretion may protect the cells of the airway from direct exposure to inhaled acidic mists (which also protects the stomach lining from the hydrochloric acid secreted there).</p> <p>The material may produce severe irritation to the eye causing pronounced inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.</p> <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> <p>Prolonged or repeated exposure to acetic acid may produce irritation and/ or corrosion at the site of contact as well as systemic toxicity.</p> <p>Prolonged inhalation exposure results in muscle imbalance, increase in blood cholinesterase activity, decrease in albumin and decreased growth but no reproductive or foetal toxicity, according to animal testing.</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 either not available or does not fill the criteria for classification  
 ✓ – Data available to make classification

## SECTION 12 Ecological information

### Toxicity

|                                   |                                                                                                                                                                                                                                                                                                                          |                           |                               |               |               |
|-----------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------|-------------------------------|---------------|---------------|
| <b>D-Lead Test Kit Solution 1</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>acetic acid glacial</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 | 29.23mg/l     | 2             |
|                                   | EC50                                                                                                                                                                                                                                                                                                                     | 48h                       | Crustacea                     | 18.9mg/l      | 2             |
|                                   | EC50                                                                                                                                                                                                                                                                                                                     | 96h                       | Algae or other aquatic plants | 73.4mg/l      | 4             |
|                                   | LC50                                                                                                                                                                                                                                                                                                                     | 96h                       | Fish                          | 31.3-67.6mg/l | 2             |
|                                   | EC50(ECx)                                                                                                                                                                                                                                                                                                                | 24h                       | Algae or other aquatic plants | 0.08mg/l      | 2             |
| <b>Legend:</b>                    | Extracted from 1. IUCLID Toxicity Data 2. Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity 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

|                     |                                |                         |
|---------------------|--------------------------------|-------------------------|
| <b>Ingredient</b>   | <b>Persistence: Water/Soil</b> | <b>Persistence: Air</b> |
| acetic acid glacial | LOW                            | LOW                     |

### Bioaccumulative potential

|                   |                        |
|-------------------|------------------------|
| <b>Ingredient</b> | <b>Bioaccumulation</b> |
|-------------------|------------------------|

Continued...

| Ingredient          | Bioaccumulation      |
|---------------------|----------------------|
| acetic acid glacial | LOW (LogKOW = -0.17) |

**Mobility in soil**

| Ingredient          | Mobility       |
|---------------------|----------------|
| acetic acid glacial | HIGH (KOC = 1) |

**SECTION 13 Disposal considerations****Waste treatment methods**

|                                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |
|-------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Product / Packaging disposal</b> | <ul style="list-style-type: none"> <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.</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. Observe all label safeguards until containers are cleaned and destroyed.</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****14.7.1. 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         |
|---------------------|---------------|
| acetic acid glacial | Not Available |

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

| Product name        | Ship Type     |
|---------------------|---------------|
| acetic acid glacial | Not Available |

**SECTION 15 Regulatory information****Safety, health and environmental regulations / legislation specific for the substance or mixture****acetic acid glacial is found on the following regulatory lists**

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals  
 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  
 Australian Inventory of Industrial Chemicals (AIIC)

**National Inventory Status**

| National Inventory                              | Status                   |
|-------------------------------------------------|--------------------------|
| Australia - AIIC / Australia Non-Industrial Use | Yes                      |
| Canada - DSL                                    | Yes                      |
| Canada - NDSL                                   | No (acetic acid glacial) |
| China - IECSC                                   | Yes                      |
| Europe - EINEC / ELINCS / NLP                   | Yes                      |
| Japan - ENCS                                    | Yes                      |
| Korea - KECI                                    | Yes                      |
| New Zealand - NZIoC                             | Yes                      |
| Philippines - PICCS                             | Yes                      |
| USA - TSCA                                      | Yes                      |
| Taiwan - TCSI                                   | Yes                      |

| National Inventory | Status                                                                                                                                                                                                       |
|--------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Mexico - INSQ      | Yes                                                                                                                                                                                                          |
| Vietnam - NCI      | Yes                                                                                                                                                                                                          |
| Russia - FBEPH     | Yes                                                                                                                                                                                                          |
| <b>Legend:</b>     | <p>Yes = All CAS declared ingredients are on the inventory</p> <p>No = One or more of the CAS listed ingredients are not on the inventory. These ingredients may be exempt or will require registration.</p> |

## SECTION 16 Other information

|                      |            |
|----------------------|------------|
| <b>Revision Date</b> | 23/12/2022 |
| <b>Initial Date</b>  | 28/01/2020 |

### SDS Version Summary

| Version | Date of Update | Sections Updated                                                      |
|---------|----------------|-----------------------------------------------------------------------|
| 3.1     | 30/12/2020     | Classification change due to full database hazard calculation/update. |
| 4.1     | 23/12/2022     | Classification review due to GHS Revision change.                     |

### 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
- ▶ 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
  
- ▶ 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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