

Swan Etching Kit B

Swan Analytical Australia Pty Ltd

Chemwatch Hazard Alert Code: 2

Chemwatch: 18-8248
Version No: 4.1.1.1
Safety Data Sheet according to WHS and ADG requirements

Issue Date: 01/11/2019
Print Date: 09/12/2019
S.GHS.AUS.EN

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

Product Identifier

| | |
|-------------------------------|-------------------------------------|
| Product name | Swan Etching Kit B |
| Synonyms | Swan Etching Kit B: Acetic Acid <1% |
| Other means of identification | Not Available |

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

| | |
|--------------------------|--|
| Relevant identified uses | Sodium electrode etching solution; mix before use with product no. 87.729.010 A. |
|--------------------------|--|

Details of the supplier of the safety data sheet

| Registered company name | Swan Analytical Australia Pty Ltd | SWAN Analytical New Zealand Pty Ltd |
|-------------------------|--|---|
| Address | Unit 12 45 Leighton Place Hornsby NSW 2077 Australia | PO Box 125201 St Heliers, Auckland 1740 New Zealand |
| Telephone | +61 2 9482 1455 | +64 (0)9 213 7191 |
| Fax | +61 2 9482 1489 | Not Available |
| Website | www.swan.ch | www.swan-analytical.co.nz |
| Email | sales@swan-analytical.com.au | sales@swan-analytical.co.nz |

Emergency telephone number

| Association / Organisation | Chemwatch | CHEMWATCH EMERGENCY RESPONSE |
|-----------------------------------|-------------------|------------------------------|
| Emergency telephone numbers | +800 2436 2255 | +61 1800 951 288 |
| Other emergency telephone numbers | +64 (0)9 213 7191 | +61 2 9186 1132 |

Once connected and if the message is not in your preferred language then please dial 01

SECTION 2 HAZARDS IDENTIFICATION


Classification of the substance or mixture

CHEMWATCH HAZARD RATINGS

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

| | |
|--------------------|---|
| Poisons Schedule | Not Applicable |
| Classification [1] | Skin Corrosion/Irritation Category 2, Eye Irritation Category 2A |
| 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 | WARNING |
|-------------|----------------|

Hazard statement(s)

| | |
|------|-------------------------|
| H315 | Causes skin irritation. |
|------|-------------------------|

| | |
|-------------|--------------------------------|
| H319 | Causes serious eye irritation. |
|-------------|--------------------------------|

Precautionary statement(s) Prevention

| | |
|-------------|--|
| P280 | Wear protective gloves/protective clothing/eye protection/face protection. |
|-------------|--|

Precautionary statement(s) Response

| | |
|-------------|--|
| P321 | Specific treatment (see advice on this label). |
|-------------|--|

| | |
|-------------|---|
| P362 | Take off contaminated clothing and wash before reuse. |
|-------------|---|

| | |
|-----------------------|--|
| P305+P351+P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
|-----------------------|--|

| | |
|------------------|---|
| P337+P313 | If eye irritation persists: Get medical advice/attention. |
|------------------|---|

Precautionary statement(s) Storage

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 | 1 | acetic acid glacial |
| Not Available | | No other ingredient information supplied. |

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

| | |
|---------------------|---|
| Eye Contact | If this product comes in contact with eyes: <ul style="list-style-type: none"> ▶ Wash out immediately with water. ▶ If irritation continues, seek medical attention. ▶ Removal of contact lenses after an eye injury should only be undertaken by skilled personnel. |
| Skin Contact | If skin or hair contact occurs: <ul style="list-style-type: none"> ▶ Flush skin and hair with running water (and soap if available). ▶ Seek medical attention in event of irritation. |
| Inhalation | <ul style="list-style-type: none"> ▶ If fumes, aerosols or combustion products are inhaled remove from contaminated area. ▶ Other measures are usually unnecessary. |
| Ingestion | <ul style="list-style-type: none"> ▶ Immediately give a glass of water. ▶ First aid is not generally required. If in doubt, contact a Poisons Information Centre or a doctor. |

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5 FIREFIGHTING MEASURES**Extinguishing media**

- ▶ Water spray or fog.
- ▶ Foam.
- ▶ Dry chemical powder.
- ▶ BCF (where regulations permit).

Special hazards arising from the substrate or mixture

| | |
|-----------------------------|--|
| Fire Incompatibility | ▶ Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result |
|-----------------------------|--|

Advice for firefighters

| | |
|------------------------------|---|
| Fire Fighting | <ul style="list-style-type: none"> ▶ Alert Fire Brigade and tell them location and nature of hazard. ▶ Wear full body protective clothing with breathing apparatus. ▶ Prevent, by any means available, spillage from entering drains or water course. ▶ Use water delivered as a fine spray to control fire and cool adjacent area. |
| Fire/Explosion Hazard | <ul style="list-style-type: none"> ▶ Combustible. ▶ Slight fire hazard when exposed to heat or flame. ▶ Heating may cause expansion or decomposition leading to violent rupture of containers. ▶ On combustion, may emit toxic fumes of carbon monoxide (CO). Combustion products include: carbon dioxide (CO ₂) other pyrolysis products typical of burning organic material. May emit poisonous fumes. |
| HAZCHEM | 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

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

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

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling

| | |
|--------------------------|--|
| Safe handling | <ul style="list-style-type: none"> ▶ Avoid all personal contact, including inhalation. ▶ Wear protective clothing when risk of exposure occurs. ▶ Use in a well-ventilated area. ▶ Prevent concentration in hollows and sumps. |
| Other information | <ul style="list-style-type: none"> ▶ Store in original containers. ▶ Keep containers securely sealed. ▶ No smoking, naked lights or ignition sources. ▶ Store in a cool, dry, well-ventilated area. |

Conditions for safe storage, including any incompatibilities

| | |
|--------------------------------|---|
| Suitable container | <ul style="list-style-type: none"> ▶ Metal can or drum ▶ Packaging as recommended by manufacturer. ▶ Check all containers are clearly labelled and free from leaks. |
| Storage incompatibility | <p>Acetic acid:</p> <ul style="list-style-type: none"> ▶ vapours forms explosive mixtures with air (above 39 C.) ▶ reacts violently with bases such as carbonates and hydroxides (giving off large quantities of heat), oxidisers, organic amines, acetaldehyde, potassium tert-butoxide ▶ reacts (sometimes violently), with strong acids, aliphatic amines, alkanolamines, alkylene oxides, epichlorohydrin, acetic anhydride, 2-aminoethanol, ammonia, ammonium nitrate, bromine pentafluoride, chlorosulfonic acid, chromic acid, chromium trioxide, ethylenediamine, ethyleneimine, hydrogen peroxide, isocyanates, oleum, perchloric acid, permanganates, phosphorus isocyanate, phosphorus trichloride, sodium peroxide, xylene ▶ attacks cast iron, stainless steel and other metals, forming flammable hydrogen gas ▶ attacks many forms of rubber, plastics and coatings ▶ Avoid reaction with oxidising agents |



+ X + O + + +

X — Must not be stored together

O — May be stored together with specific preventions

+ — May be stored together

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/m3 | 37 mg/m3 / 15 ppm | Not Available | Not Available |

EMERGENCY LIMITS

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

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

Exposure controls

| | |
|---|--|
| Appropriate engineering controls | Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection. The basic types of engineering controls are: Process controls which involve changing the way a job activity or process is done to reduce the risk. 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. |
| Personal protection |  |
| Eye and face protection | <ul style="list-style-type: none"> ▶ Safety glasses with side shields ▶ Chemical goggles. ▶ 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. |
| Skin protection | See Hand protection below |
| Hands/feet protection | 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. 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. Personal hygiene is a key element of effective hand care. <ul style="list-style-type: none"> ▶ Wear chemical protective gloves, e.g. PVC. ▶ Wear safety footwear or safety gumboots, e.g. Rubber |
| Body protection | See Other protection below |
| Other protection | <ul style="list-style-type: none"> ▶ Overalls. ▶ P.V.C. apron. ▶ Barrier cream. |

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 | 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. -

* 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 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(SO₂), G = Agricultural chemicals, K = Ammonia(NH₃), Hg = Mercury, NO = Oxides of nitrogen, MB = Methyl bromide, AX = Low boiling point organic compounds(below 65 degC)

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

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES**Information on basic physical and chemical properties**

| | | | |
|------------------------|--|--|---------------|
| Appearance | Colourless liquid with a vinegar like odour; mixes with water. | | |
| Physical state | Liquid | Relative density (Water = 1) | 1.1 |
| Odour | Not Available | Partition coefficient n-octanol / water | Not Available |
| Odour threshold | Not Available | Auto-ignition temperature (°C) | Not Available |

Continued...

Swan Etching Kit B

| | | | |
|--|---------------|----------------------------------|----------------|
| pH (as supplied) | 4.5 | Decomposition temperature | Not Available |
| Melting point / freezing point (°C) | Not Available | Viscosity (cSt) | Not Available |
| Initial boiling point and boiling range (°C) | ~100 | Molecular weight (g/mol) | Not Applicable |
| Flash point (°C) | Not Available | Taste | Not Available |
| Evaporation rate | Not Available | Explosive properties | Not Available |
| Flammability | Not Available | Oxidising properties | Not Available |
| 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 | Miscible | 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"> ▶ Unstable in the presence of incompatible materials. ▶ Product is considered stable. ▶ Hazardous polymerisation will not occur. |
| 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 | The material is not thought to produce adverse health effects or irritation of the respiratory tract (as classified by EC Directives using animal models). Nevertheless, good hygiene practice requires that exposure be kept to a minimum and that suitable control measures be used in an occupational setting. |
| Ingestion | The material has NOT 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 | Open cuts, abraded or irritated skin should not be exposed to this material. 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. There is some evidence to suggest that this material can cause inflammation of the skin on contact in some persons. |
| Eye | Although the liquid is not thought to be an irritant (as classified by EC Directives), direct contact with the eye may produce transient discomfort characterised by tearing or conjunctival redness (as with windburn). |
| Chronic | Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure. |

| | | |
|---------------------|--|------------------------------------|
| Swan Etching Kit B | TOXICITY | IRRITATION |
| | Not Available | Not Available |
| acetic acid glacial | TOXICITY | IRRITATION |
| | Dermal (rabbit) LD50: 1060 mg/kg ^[2] | Eye (rabbit): 0.05mg (open)-SEVERE |
| | Inhalation (rat) LC50: 11 mg/l/4H ^[2] | Skin (human):50mg/24hr - mild |
| | Oral (rat) LD50: 3310 mg/kg ^[2] | Skin (rabbit):525mg (open)-SEVERE |
| 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 | |

| | |
|----------------------------|--|
| ACETIC ACID GLACIAL | <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.</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</p> |
|----------------------------|--|

Swan Etching Kit B

| | | | |
|-----------------------------------|--|--------------------------|---|
| | but no reproductive or foetal toxicity, according to animal testing. | | |
| Acute Toxicity | ✗ | Carcinogenicity | ✗ |
| Skin Irritation/Corrosion | ✓ | Reproductivity | ✗ |
| Serious Eye Damage/Irritation | ✓ | STOT - Single Exposure | ✗ |
| Respiratory or Skin sensitisation | ✗ | STOT - Repeated Exposure | ✗ |
| Mutagenicity | ✗ | Aspiration Hazard | ✗ |

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

SECTION 12 ECOLOGICAL INFORMATION

Toxicity

| Swan Etching Kit B | ENDPOINT | TEST DURATION (HR) | SPECIES | VALUE | SOURCE |
|--------------------|---------------|--------------------|---------------|---------------|---------------|
| | Not Available | Not Available | Not Available | Not Available | Not Available |

| acetic acid glacial | ENDPOINT | TEST DURATION (HR) | SPECIES | VALUE | SOURCE |
|---------------------|----------|--------------------|-------------------------------|---------|--------|
| | LC50 | 96 | Fish | >1-mg/L | 2 |
| | EC50 | 48 | Crustacea | >1-mg/L | 2 |
| | EC50 | 72 | Algae or other aquatic plants | >1-mg/L | 2 |
| | NOEC | 72 | Algae or other aquatic plants | 1-mg/L | 2 |

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

For Acetic Acid: Acetic acid and its salts (the acetates) can be grouped together because of their close structural relationships, their natural occurrence in plants and animals, and their fundamental role in cell metabolism.

Atmospheric Fate: Acetic acid is degraded photochemically in the atmosphere to produce hydroxyl radicals (estimated typical half-life of 22 days). Physical removal of acetates on atmospheric particulates may occur via wet or dry deposition.

Aquatic Fate: Natural water will neutralize dilute solutions of acetic acid.

DO NOT discharge into sewer or waterways.

Persistence and degradability

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

Bioaccumulative potential

| 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

| | |
|------------------------------|---|
| Product / Packaging disposal | <ul style="list-style-type: none"> ▶ DO NOT allow wash water from cleaning or process equipment to enter drains. ▶ It may be necessary to collect all wash water for treatment before disposal. ▶ In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first. ▶ Where in doubt contact the responsible authority. ▶ Recycle wherever possible or consult manufacturer for recycling options. ▶ Consult State Land Waste Authority for disposal. ▶ Bury or incinerate residue at an approved site. ▶ Recycle containers if possible, or dispose of in an authorised landfill. |
|------------------------------|---|

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****ACETIC ACID GLACIAL IS FOUND ON THE FOLLOWING REGULATORY LISTS**

Australia Dangerous Goods Code (ADG Code) - Dangerous Goods List

Australia Dangerous Goods Code (ADG Code) - List of Emergency Action Codes

Australia Exposure Standards

Australia Hazardous Chemical Information System (HCIS) - Hazardous Chemicals

Australia Inventory of Chemical Substances (AICS)

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

GESAMP/EHS Composite List - GESAMP Hazard Profiles

IMO IBC Code Chapter 17: Summary of minimum requirements

IMO MARPOL (Annex II) - List of Noxious Liquid Substances Carried in Bulk

IMO Provisional Categorization of Liquid Substances - List 3: (Trade-named) mixtures containing at least 99% by weight of components already assessed by IMO, presenting safety hazards

International Air Transport Association (IATA) Dangerous Goods Regulations

International Maritime Dangerous Goods Requirements (IMDG Code)

United Nations Recommendations on the Transport of Dangerous Goods Model Regulations

National Inventory Status

| National Inventory | Status |
|-------------------------------|---|
| Australia - AICS | 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 |
| Mexico - INSQ | Yes |
| Vietnam - NCI | Yes |
| Russia - ARIPS | Yes |
| Legend: | Yes = All CAS declared ingredients are on the inventory No = One or more of the CAS listed ingredients are not on the inventory and are not exempt from listing (see specific ingredients in brackets) |

SECTION 16 OTHER INFORMATION

| | |
|----------------------|------------|
| Revision Date | 01/11/2019 |
| Initial Date | 27/07/2009 |

SDS Version Summary

| Version | Issue Date | Sections Updated |
|---------|------------|--|
| 3.1.1.1 | 07/11/2014 | Synonyms, Name |
| 4.1.1.1 | 01/11/2019 | One-off system update. NOTE: This may or may not change the GHS classification |

Other information

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

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

Definitions and abbreviations

PC—TWA: Permissible Concentration-Time Weighted Average

PC—STEL: Permissible Concentration-Short Term Exposure Limit

IARC: International Agency for Research on Cancer

ACGIH: American Conference of Governmental Industrial Hygienists

STEL: Short Term Exposure Limit

TEEL: Temporary Emergency Exposure Limit.

IDLH: Immediately Dangerous to Life or Health Concentrations

OSF: Odour Safety Factor

NOAEL :No Observed Adverse Effect Level

LOAEL: Lowest Observed Adverse Effect Level

TLV: Threshold Limit Value

LOD: Limit Of Detection

OTV: Odour Threshold Value
BCF: BioConcentration Factors
BEI: Biological Exposure Index

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