

Material Safety Data Sheet Cover-Sheet – This page provides additional New Zealand specific information for this product and must be read in conjunction with the Safety Data Sheet (SDS) attached

Product Name: Stae

Manufacturer: SDI Limited

SDS Expiry: 20 August 2026

Supplier Details: Henry Schein New Zealand
243-249 Bush Road, Rosedale, Auckland, 0632
PO Box 101 140, North Shore, Auckland 0745
Ph. 0800 808 855
www.henryschein.co.nz

Emergency Contacts: Poisons/Hazardous Chemical Info Centre –
0800POISON/0800764766 (24 Hours)
Phone 111 for Fire, Ambulance or Police

HSNO Class/Category: 3 / 6

HSNO Group Standard: Dental Products Flammable Group Standard 2020 HSR002556

Statements/Pictograms: As per attached Safety Data Sheet (SDS)

Date Prepared: This coversheet was prepared – January 2026

This SDS coversheet has been produced by Henry Schein NZ and has been prepared in accordance with NZ EPA advice on making overseas SDS compliant to HSNO Act. The above information is based on the present state of our knowledge of the product at the time of publication. It is given in good faith, no warranty is implied with respect to the quality or the specifications of the product. Users must satisfy that the product is entirely suitable for their purpose. The SDS and this coversheet may be revised from time to time, please ensure you have a current copy.



Stae SDI Limited

Version No: 7.1

Safety Data Sheet according to the Health and Safety at Work (Hazardous Substances) Regulations 2017

Issue Date: 20/08/2021

Print Date: 22/11/2023

L.GHS.NZL.EN

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

Product Identifier

| | |
|-------------------------------|---|
| Product name | Stae |
| Chemical Name | Not Applicable |
| Synonyms | Not Available |
| Proper shipping name | FLAMMABLE LIQUID, N.O.S. (contains acetone) |
| 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 | For bonding of composite to tooth surfaces by dental professionals. |
|--------------------------|---|

Details of the manufacturer or supplier of the safety data sheet

| Registered company name | SDI Limited | SDI (North America) Inc. | SDI HOLDINGS PTY LTD DO |
|-------------------------|--|---|---|
| Address | 3-15 Brunson Street Bayswater VIC 3153 Australia | 1279 Hamilton Parkway Itasca IL 60143 United States | Rua Dr. Reinaldo Schmithausen 3141 – Cordeiros Itajaí – SC – CEP 88310-004 Brazil |
| Telephone | +61 3 8727 7111 | +1 630 361 9200 | +55 11 3092 7100 |
| Fax | +61 3 8727 7222 | Not Available | Not Available |
| Website | www.sdi.com.au | www.sdi.com.au | http://www.sdi.com.au/ |
| Email | info@sdi.com.au | USA.Canada@sdi.com.au | Brasil@sdi.com.au |

| | |
|-------------------------|--|
| Registered company name | SDI Germany GmbH |
| Address | Hansestrasse 85 Cologne D-51149 Germany |
| Telephone | +49 0 2203 9255 0 |
| Fax | +49 0 2203 9255 200 |
| Website | www.sdi.com.au |
| Email | germany@sdi.com.au |

Emergency telephone number

| | | |
|-----------------------------------|-----------------------------------|-------------------------------------|
| Association / Organisation | SDI Limited | CHEMWATCH EMERGENCY RESPONSE (24/7) |
| Emergency telephone numbers | 131126 Poisons Information Centre | +64 800 700 112 |
| Other emergency telephone numbers | +61 3 8727 7111 | +61 3 9573 3188 |



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

| | |
|-----------------------------|---|
| Classification [1] | Flammable Liquids Category 2, Skin Corrosion/Irritation Category 2, Sensitisation (Skin) Category 1, Serious Eye Damage/Eye Irritation Category 2, Specific Target Organ Toxicity - Single Exposure (Respiratory Tract Irritation) Category 3, Specific Target Organ Toxicity - Single Exposure (Narcotic Effects) Category 3 |
| Legend: | 1. Classification by vendor; 2. Classification drawn from CCID EPA NZ; 3. Classification drawn from Regulation (EU) No 1272/2008 - Annex VI |
| Gazetted by EPA New Zealand | 3.1B, 6.3A, 6.4A, 6.5B (contact), 6.9B (narcotic effects), 6.1E (respiratory tract irritant) |

Label elements

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

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Signal word **Danger**

Hazard statement(s)

| | |
|------|--------------------------------------|
| H225 | Highly flammable liquid and vapour. |
| H315 | Causes skin irritation. |
| H317 | May cause an allergic skin reaction. |
| H319 | Causes serious eye irritation. |
| H335 | May cause respiratory irritation. |
| H336 | May cause drowsiness or dizziness. |

Precautionary statement(s) Prevention

| | |
|------|--|
| P210 | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. |
| P271 | Use only outdoors or in a well-ventilated area. |
| P280 | Wear protective gloves, protective clothing, eye protection and face protection. |
| P240 | Ground and bond container and receiving equipment. |
| P241 | Use explosion-proof electrical/ventilating/lighting/intrinsically safe equipment. |
| P242 | Use non-sparking tools. |
| P243 | Take action to prevent static discharges. |
| P261 | Avoid breathing mist/vapours/spray. |
| P264 | Wash all exposed external body areas thoroughly after handling. |
| P272 | Contaminated work clothing should not be allowed out of the workplace. |

Precautionary statement(s) Response

| | |
|----------------|--|
| P370+P378 | In case of fire: Use alcohol resistant foam or normal protein foam to extinguish. |
| P302+P352 | IF ON SKIN: Wash with plenty of water. |
| P305+P351+P338 | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| P312 | Call a POISON CENTER/doctor/physician/first aider/if you feel unwell. |
| P333+P313 | If skin irritation or rash occurs: Get medical advice/attention. |
| P337+P313 | If eye irritation persists: Get medical advice/attention. |
| P362+P364 | Take off contaminated clothing and wash it before reuse. |
| P303+P361+P353 | IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower]. |
| P304+P340 | IF INHALED: Remove person to fresh air and keep comfortable for breathing. |

Precautionary statement(s) Storage

| | |
|-----------|--|
| P403+P235 | Store in a well-ventilated place. Keep cool. |
| P405 | Store locked up. |

Precautionary statement(s) Disposal

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

SECTION 3 Composition / information on ingredients

Substances

See section below for composition of Mixtures

Mixtures

| CAS No | %[weight] | Name |
|---------------|-----------|-----------------|
| 67-64-1 | 50-55 | acetone |
| Not Available | 20-40 | acrylic monomer |

Legend: 1. Classification by vendor; 2. Classification drawn from CCID EPA NZ; 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

| | |
|--------------|--|
| Eye Contact | <p>If this product comes in contact with the eyes:</p> <ul style="list-style-type: none"> ▶ Immediately hold eyelids apart and flush the eye continuously with running water. ▶ 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. ▶ Continue flushing until advised to stop by the Poisons Information Centre or a doctor, or for at least 15 minutes. ▶ Transport to hospital or doctor without delay. ▶ Removal of contact lenses after an eye injury should only be undertaken by skilled personnel. |
| Skin Contact | <p>If skin contact occurs:</p> <ul style="list-style-type: none"> ▶ Immediately remove all contaminated clothing, including footwear. ▶ Flush skin and hair with running water (and soap if available). |

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| | <ul style="list-style-type: none"> ▸ Seek medical attention in event of irritation. |
| Inhalation | <ul style="list-style-type: none"> ▸ If fumes or combustion products are inhaled remove from contaminated area. ▸ Lay patient down. Keep warm and rested. ▸ Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures. ▸ 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. ▸ Transport to hospital, or doctor, without delay. |
| Ingestion | Seek medical attention. |

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5 Firefighting measures**Extinguishing media**

- Alcohol stable foam.
- Dry chemical powder.
- BCF (where regulations permit).
- Carbon dioxide.
- Water spray or fog - Large fires only.

Special hazards arising from the substrate or mixture

| | |
|----------------------|-------------|
| Fire Incompatibility | None known. |
|----------------------|-------------|

Advice for firefighters

| | |
|-----------------------|---|
| Fire Fighting | <ul style="list-style-type: none"> ▸ Alert Fire Brigade and tell them location and nature of hazard. ▸ May be violently or explosively reactive. ▸ Wear breathing apparatus plus protective gloves in the event of a fire. ▸ Prevent, by any means available, spillage from entering drains or water course. ▸ Consider evacuation (or protect in place). ▸ Fight fire from a safe distance, with adequate cover. ▸ If safe, switch off electrical equipment until vapour fire hazard removed. ▸ Use water delivered as a fine spray to control the fire and cool adjacent area. ▸ Avoid spraying water onto liquid pools. ▸ Do not approach containers suspected to be hot. ▸ Cool fire exposed containers with water spray from a protected location. ▸ If safe to do so, remove containers from path of fire. |
| Fire/Explosion Hazard | <ul style="list-style-type: none"> ▸ Liquid and vapour are highly flammable. ▸ Severe fire hazard when exposed to heat, flame and/or oxidisers. ▸ Vapour may travel a considerable distance to source of ignition. ▸ Heating may cause expansion or decomposition leading to violent rupture of containers. ▸ On combustion, may emit toxic fumes of carbon monoxide (CO). <p>Combustion products include: carbon dioxide (CO₂) other pyrolysis products typical of burning organic material.</p> |

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

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|--------------|--|
| 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. ▸ Contain and absorb small quantities with vermiculite or other absorbent material. ▸ Wipe up. ▸ Collect residues in a flammable waste container. |
| Major Spills | <ul style="list-style-type: none"> ▸ Clear area of personnel and move upwind. ▸ Alert Fire Brigade and tell them location and nature of hazard. ▸ May be violently or explosively reactive. ▸ Wear breathing apparatus plus protective gloves. ▸ Prevent, by any means available, spillage from entering drains or water course. ▸ Consider evacuation (or protect in place). ▸ No smoking, naked lights or ignition sources. ▸ Increase ventilation. ▸ Stop leak if safe to do so. ▸ Water spray or fog may be used to disperse /absorb vapour. ▸ Contain spill with sand, earth or vermiculite. ▸ Use only spark-free shovels and explosion proof equipment. ▸ Collect recoverable product into labelled containers for recycling. ▸ Absorb remaining product with sand, earth or vermiculite. ▸ Collect solid residues and seal in labelled drums for disposal. ▸ Wash area and prevent runoff into drains. ▸ If contamination of drains or waterways occurs, advise emergency services. |

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

SECTION 7 Handling and storage

Precautions for safe handling

| | |
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| 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.DO NOT enter confined spaces until atmosphere has been checked.Avoid smoking, naked lights, heat or ignition sources.When handling, DO NOT eat, drink or smoke.Vapour may ignite on pumping or pouring due to static electricity.DO NOT use plastic buckets.Earth and secure metal containers when dispensing or pouring product.Use spark-free tools when handling.Avoid contact with incompatible materials.Keep containers securely sealed.Avoid physical damage to containers.Always wash hands with soap and water after handling.Work clothes should be laundered separately.Use good occupational work practice.Observe manufacturer's storage and handling recommendations contained within this SDS.Atmosphere should be regularly checked against established exposure standards to ensure safe working conditions. |
| Other information | <p>Store in a dry and well ventilated-area, away from heat and sunlight.</p> <p>Store between 10 and 25 deg. C.</p> |

Conditions for safe storage, including any incompatibilities

| | |
|-------------------------|---|
| Suitable container | <ul style="list-style-type: none">DO NOT repack. Use containers supplied by manufacturer only. |
| Storage incompatibility | <ul style="list-style-type: none">Avoid storage with reducing agents.Avoid strong acids, acid chlorides, acid anhydrides and chloroformates. |

SECTION 8 Exposure controls / personal protection

Control parameters

Occupational Exposure Limits (OEL)

INGREDIENT DATA

| Source | Ingredient | Material name | TWA | STEL | Peak | Notes |
|--|------------|---------------|----------------------|-----------------------|---------------|---|
| New Zealand Workplace Exposure Standards (WES) | acetone | Acetone | 500 ppm / 1185 mg/m3 | 2375 mg/m3 / 1000 ppm | Not Available | (bio) - Exposure can also be estimated by biological monitoring |

Emergency Limits

| Ingredient | TEEL-1 | TEEL-2 | TEEL-3 |
|------------|---------------|---------------|---------------|
| acetone | Not Available | Not Available | Not Available |

| Ingredient | Original IDLH | Revised IDLH |
|------------|---------------|---------------|
| acetone | 2,500 ppm | Not Available |

MATERIAL DATA

Exposure 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. 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.


Employers may need to use multiple types of controls to prevent employee overexposure.

For flammable liquids and flammable gases, local exhaust ventilation or a process enclosure ventilation system may be required. Ventilation equipment should be explosion-resistant.

Air contaminants generated in the workplace possess varying "escape" velocities which, in turn, determine the "capture velocities" of fresh circulating air required to effectively remove the contaminant.

| | | | |
|----------------------------------|---|--|---------------------------------|
| Appropriate engineering controls | Type of Contaminant: | | Air Speed: |
| | solvent, vapours, degreasing etc., evaporating from tank (in still air). | | 0.25-0.5 m/s (50-100 f/min.) |
| | aerosols, fumes from pouring operations, intermittent container filling, low speed conveyer transfers, welding, spray drift, plating acid fumes, pickling (released at low velocity into zone of active generation) | | 0.5-1 m/s (100-200 f/min.) |
| | direct spray, spray painting in shallow booths, drum filling, conveyer loading, crusher dusts, gas discharge (active generation into zone of rapid air motion) | | 1-2.5 m/s (200-500 f/min.) |
| | Within each range the appropriate value depends on: | | |

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| | Lower end of the range | Upper end of the range |
| | 1: Room air currents minimal or favourable to capture | 1: Disturbing room air currents |
| | 2: Contaminants of low toxicity or of nuisance value only. | 2: Contaminants of high toxicity |
| | 3: Intermittent, low production. | 3: High production, heavy use |
| | 4: Large hood or large air mass in motion | 4: Small hood-local control only |
| <p>Simple theory shows that air velocity falls rapidly with distance away from the opening of a simple extraction pipe. Velocity generally decreases with the square of distance from the extraction point (in simple cases). Therefore the air speed at the extraction point should be adjusted, accordingly, after reference to distance from the contaminating source. The air velocity at the extraction fan, for example, should be a minimum of 1-2 m/s (200-400 f/min.) for extraction of solvents generated in a tank 2 meters distant from the extraction point. Other mechanical considerations, producing performance deficits within the extraction apparatus, make it essential that theoretical air velocities are multiplied by factors of 10 or more when extraction systems are installed or used.</p> <ul style="list-style-type: none"> Adequate ventilation is typically taken to be that which limits the average concentration to no more than 25% of the LEL within the building, room or enclosure containing the dangerous substance. Ventilation for plant and machinery is normally considered adequate if it limits the average concentration of any dangerous substance that might potentially be present to no more than 25% of the LEL. However, an increase up to a maximum 50% LEL can be acceptable where additional safeguards are provided to prevent the formation of a hazardous explosive atmosphere. For example, gas detectors linked to emergency shutdown of the process might be used together with maintaining or increasing the exhaust ventilation on solvent evaporating ovens and gas turbine enclosures. Temporary exhaust ventilation systems may be provided for non-routine higher-risk activities, such as cleaning, repair or maintenance in tanks or other confined spaces or in an emergency after a release. The work procedures for such activities should be carefully considered. The atmosphere should be continuously monitored to ensure that ventilation is adequate and the area remains safe. Where workers will enter the space, the ventilation should ensure that the concentration of the dangerous substance does not exceed 10% of the LEL (irrespective of the provision of suitable breathing apparatus) | | |
| Individual protection measures, such as personal protective equipment |  | |
| Eye and face protection | <ul style="list-style-type: none"> Safety glasses with side shields. Chemical goggles. [AS/NZS 1337.1, EN166 or national equivalent] 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. Lens should be removed at the first signs of eye redness or irritation - lens should be removed in a clean environment only after workers have washed hands thoroughly. [CDC NIOSH Current Intelligence Bulletin 59]. | |
| Skin protection | See Hand protection below | |
| Hands/feet protection | <ul style="list-style-type: none"> Wear chemical protective gloves, e.g. PVC. Wear safety footwear or safety gumboots, e.g. Rubber Rubber Gloves | |
| Body protection | See Other protection below | |
| Other protection | <ul style="list-style-type: none"> Overalls. PVC Apron. PVC protective suit may be required if exposure severe. Eyewash unit. Ensure there is ready access to a safety shower. | |

Ansell Glove Selection

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| Glove — In order of recommendation |
| AlphaTec® 02-100 |
| MICROFLEX® 63-864 |
| MICROFLEX® Diamond Grip® MF-300 |
| TouchNTuff® 83-500 |
| AlphaTec® 15-554 |
| BioClean™ Ultimate BUPS |
| DermaShield™ 73-711 |
| MICROFLEX® 73-847 |
| MICROFLEX® NeoPro® NPG-888 |
| MICROFLEX® Neogard® C52 |

The suggested gloves for use should be confirmed with the glove supplier.

Respiratory protection

Type AX 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 | Air-line* | AX-2 | AX-PAPR-2 ^ |
| up to 20 x ES | - | AX-3 | - |
| 20+ x ES | - | Air-line** | - |

* - Continuous-flow; ** - Continuous-flow or positive pressure demand

^ - 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

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daily, regardless of the length of time used

SECTION 9 Physical and chemical properties

Information on basic physical and chemical properties

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| Appearance | Clear, pale yellow slightly viscous liquid with ester like odour, mixes with water. | | |
| Physical state | Liquid | Relative density (Water = 1) | 0.8-1.15 |
| Odour | Not Available | Partition coefficient n-octanol / water | Not Available |
| Odour threshold | Not Available | Auto-ignition temperature (°C) | Not Available |
| pH (as supplied) | Not Available | Decomposition temperature (°C) | Not Available |
| Melting point / freezing point (°C) | Not Available | Viscosity (cSt) | Not Available |
| Initial boiling point and boiling range (°C) | gels before boiling | 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 (%) | 13 | Surface Tension (dyn/cm or mN/m) | Not Available |
| Lower Explosive Limit (%) | 3 | 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

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| 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 | Evidence shows, or practical experience predicts, that the material produces irritation of the respiratory system, in a substantial number of individuals, following inhalation. In contrast to most organs, the lung is able to respond to a chemical insult by first removing or neutralising the irritant and then repairing the damage. The repair process, which initially evolved to protect mammalian lungs from foreign matter and antigens, may however, produce further lung damage resulting in the impairment of gas exchange, the primary function of the lungs. Respiratory tract irritation often results in an inflammatory response involving the recruitment and activation of many cell types, mainly derived from the vascular system. Inhalation of vapours may cause drowsiness and dizziness. This may be accompanied by narcosis, reduced alertness, loss of reflexes, lack of coordination and vertigo. |
| Ingestion | Accidental ingestion of the material may be damaging to the health of the individual. |
| Skin Contact | Repeated exposure may cause skin cracking, flaking or drying following normal handling and use. Open cuts, abraded or irritated skin should not be exposed to this material Entry into the blood-stream through, for example, cuts, abrasions, puncture wounds 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. Evidence exists, or practical experience predicts, that the material either produces inflammation of the skin in a substantial number of individuals following direct contact, and/or produces significant inflammation when applied to the healthy intact skin of animals, for up to four hours, such inflammation being present twenty-four hours or more after the end of the exposure period. Skin irritation may also be present after prolonged or repeated exposure; this may result in a form of contact dermatitis (nonallergic). The dermatitis is often characterised by skin redness (erythema) and swelling (oedema) which may progress to blistering (vesiculation), scaling and thickening of the epidermis. At the microscopic level there may be intercellular oedema of the spongy layer of the skin (spongiosis) and intracellular oedema of the epidermis. |
| Eye | Evidence exists, or practical experience predicts, that the material may cause severe eye irritation in a substantial number of individuals and/or may produce significant ocular lesions which are present twenty-four hours or more after instillation into the eye(s) of experimental animals. Eye contact may cause significant inflammation with pain. Corneal injury may occur; permanent impairment of vision may result unless treatment is prompt and adequate. Repeated or prolonged exposure to irritants may cause inflammation characterised by a temporary redness (similar to windburn) of the conjunctiva (conjunctivitis); temporary impairment of vision and/or other transient eye damage/ulceration may occur. |
| Chronic | Long-term exposure to respiratory irritants may result in disease of the airways involving difficult breathing and related systemic problems. Practical experience shows that skin contact with the material is capable either of inducing a sensitisation reaction in a substantial number of individuals, and/or of producing a positive response in experimental animals. Substances that can cause occupational asthma (also known as asthmagens and respiratory sensitisers) can induce a state of specific airway |

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| | <p>hyper-responsiveness via an immunological, irritant or other mechanism. Once the airways have become hyper-responsive, further exposure to the substance, sometimes even to tiny quantities, may cause respiratory symptoms. These symptoms can range in severity from a runny nose to asthma. Not all workers who are exposed to a sensitiser will become hyper-responsive and it is impossible to identify in advance who are likely to become hyper-responsive.</p> <p>Substances that can cause occupational asthma should be distinguished from substances which may trigger the symptoms of asthma in people with pre-existing air-way hyper-responsiveness. The latter substances are not classified as asthmagens or respiratory sensitisers. Wherever it is reasonably practicable, exposure to substances that can cause occupational asthma should be prevented. Where this is not possible the primary aim is to apply adequate standards of control to prevent workers from becoming hyper-responsive.</p> <p>Activities giving rise to short-term peak concentrations should receive particular attention when risk management is being considered. Health surveillance is appropriate for all employees exposed or liable to be exposed to a substance which may cause occupational asthma and there should be appropriate consultation with an occupational health professional over the degree of risk and level of surveillance.</p> <p>Prolonged or repeated skin contact may cause drying with cracking, irritation and possible dermatitis following.</p> <p>Limited evidence suggests that repeated or long-term occupational exposure may produce cumulative health effects involving organs or biochemical systems.</p> |
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| Stae | TOXICITY | IRRITATION |
|----------------|---|--|
| | Not Available | Not Available |
| acetone | TOXICITY | IRRITATION |
| | Dermal (rabbit) LD50: 20000 mg/kg ^[2] | Eye (human): 500 ppm - irritant |
| | Inhalation(Mouse) LC50: 44 mg/L4h ^[2] | Eye (rabbit): 20mg/24hr - moderate |
| | Oral (Rat) LD50: 5800 mg/kg ^[2] | Eye (rabbit): 3.95 mg - SEVERE |
| | | Eye: adverse effect observed (irritating) ^[1] |
| | | Skin (rabbit): 500 mg/24hr - mild |
| | | Skin (rabbit): 395mg (open) - mild |
| | | Skin: no adverse effect observed (not irritating) ^[1] |
| 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 | |

| ACETONE | <p>The material may cause skin irritation after prolonged or repeated exposure and may produce a contact dermatitis (nonallergic). This form of dermatitis is often characterised by skin redness (erythema) and swelling epidermis. Histologically there may be intercellular oedema of the spongy layer (spongiosis) and intracellular oedema of the epidermis.</p> <p>For acetone:</p> <p>The acute toxicity of acetone is low. Acetone is not a skin irritant or sensitiser but is a defatting agent to the skin. Acetone is an eye irritant. The subchronic toxicity of acetone has been examined in mice and rats that were administered acetone in the drinking water and again in rats treated by oral gavage. Acetone-induced increases in relative kidney weight changes were observed in male and female rats used in the oral 13-week study. Acetone treatment caused increases in the relative liver weight in male and female rats that were not associated with histopathologic effects and the effects may have been associated with microsomal enzyme induction. Haematologic effects consistent with macrocytic anaemia were also noted in male rats along with hyperpigmentation in the spleen. The most notable findings in the mice were increased liver and decreased spleen weights. Overall, the no-observed-effect-levels in the drinking water study were 1% for male rats (900 mg/kg/d) and male mice (2258 mg/kg/d), 2% for female mice (5945 mg/kg/d), and 5% for female rats (3100 mg/kg/d). For developmental effects, a statistically significant reduction in foetal weight, and a slight, but statistically significant increase in the percent incidence of later resorptions were seen in mice at 15,665 mg/m3 and in rats at 26,100 mg/m3. The no-observable-effect level for developmental toxicity was determined to be 5220 mg/m3 for both rats and mice.</p> <p>Teratogenic effects were not observed in rats and mice tested at 26,110 and 15,665 mg/m3, respectively. Lifetime dermal carcinogenicity studies in mice treated with up to 0.2 mL of acetone did not reveal any increase in organ tumor incidence relative to untreated control animals.</p> <p>The scientific literature contains many different studies that have measured either the neurobehavioural performance or neurophysiological response of humans exposed to acetone. Effect levels ranging from about 600 to greater than 2375 mg/m3 have been reported. Neurobehavioral studies with acetone-exposed employees have recently shown that 8-hr exposures in excess of 2375 mg/m3 were not associated with any dose-related changes in response time, vigilance, or digit span scores. Clinical case studies, controlled human volunteer studies, animal research, and occupational field evaluations all indicate that the NOAEL for this effect is 2375 mg/m3 or greater.</p> |
|---------|---|
|---------|---|

| | | | |
|-----------------------------------|---|--------------------------|---|
| 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

| Stae | Endpoint | Test Duration (hr) | Species | Value | Source |
|---------|---------------|--------------------|-------------------------------|-------------------|---------------|
| | Not Available | Not Available | Not Available | Not Available | Not Available |
| acetone | Endpoint | Test Duration (hr) | Species | Value | Source |
| | LC50 | 96h | Fish | 3744.6-5000.7mg/L | 4 |
| | NOEC(ECx) | 12h | Fish | 0.001mg/L | 4 |
| | EC50 | 72h | Algae or other aquatic plants | 5600-10000mg/l | 4 |

Continued...

Stae

| | | | | | |
|----------------|--|-----|-------------------------------|------------------|---|
| | EC50 | 48h | Crustacea | 6098.4mg/L | 5 |
| | EC50 | 96h | Algae or other aquatic plants | 9.873-27.684mg/l | 4 |
| Legend: | 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

| Ingredient | Persistence: Water/Soil | Persistence: Air |
|------------|---------------------------|----------------------------------|
| acetone | LOW (Half-life = 14 days) | MEDIUM (Half-life = 116.25 days) |

Bioaccumulative potential

| Ingredient | Bioaccumulation |
|------------|------------------|
| acetone | LOW (BCF = 0.69) |

Mobility in soil

| Ingredient | Mobility |
|------------|--------------------|
| acetone | HIGH (KOC = 1.981) |

SECTION 13 Disposal considerations

Waste treatment methods

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

Ensure that the hazardous substance is disposed in accordance with the Hazardous Substances (Disposal) Notice 2017

Disposal Requirements

Packages that have been in direct contact with the hazardous substance must be only disposed if the hazardous substance was appropriately removed and cleaned out from the package. The package must be disposed according to the manufacturer's directions taking into account the material it is made of. Packages which hazardous content have been appropriately treated and removed may be recycled.

The hazardous substance must only be disposed if it has been treated by a method that changed the characteristics or composition of the substance and it is no longer hazardous.

DO NOT deposit the hazardous substance into or onto a landfill or a sewage facility.

Burning the hazardous substance must happen under controlled conditions with no person or place exposed to


(1) a blast overpressure of more than 9 kPa; or

(2) an unsafe level of heat radiation.

The disposed hazardous substance must not come into contact with class 1 or 5 substances.

SECTION 14 Transport information

Labels Required

| | |
|-------------------------|---|
| |  |
| Marine Pollutant | NO |
| HAZCHEM | •3YE |

Land transport (UN)

| | | | | | |
|----------------------------------|---|-------|---|-------------------|----------------|
| 14.1. UN number or ID number | 1993 | | | | |
| 14.2. UN proper shipping name | FLAMMABLE LIQUID, N.O.S. (contains acetone) | | | | |
| 14.3. Transport hazard class(es) | <table> <tr> <td>Class</td><td>3</td></tr> <tr> <td>Subsidiary Hazard</td><td>Not Applicable</td></tr> </table> | Class | 3 | Subsidiary Hazard | Not Applicable |
| Class | 3 | | | | |
| Subsidiary Hazard | Not Applicable | | | | |
| 14.4. Packing group | II | | | | |
| 14.5. Environmental hazard | Not Applicable | | | | |

Continued...

| | | |
|------------------------------------|--------------------|-----|
| 14.6. Special precautions for user | Special provisions | 274 |
| | Limited quantity | 1 L |

Air transport (ICAO-IATA / DGR)

| | | |
|------------------------------------|---|----------------|
| 14.1. UN number | 1993 | |
| 14.2. UN proper shipping name | Flammable liquid, n.o.s. * (contains acetone) | |
| 14.3. Transport hazard class(es) | ICAO/IATA Class | 3 |
| | ICAO / IATA Subsidiary Hazard | Not Applicable |
| | ERG Code | 3H |
| 14.4. Packing group | II | |
| 14.5. Environmental hazard | Not Applicable | |
| 14.6. Special precautions for user | Special provisions | A3 |
| | Cargo Only Packing Instructions | 364 |
| | Cargo Only Maximum Qty / Pack | 60 L |
| | Passenger and Cargo Packing Instructions | 353 |
| | Passenger and Cargo Maximum Qty / Pack | 5 L |
| | Passenger and Cargo Limited Quantity Packing Instructions | Y341 |
| | Passenger and Cargo Limited Maximum Qty / Pack | 1 L |

Sea transport (IMDG-Code / GGVSee)

| | | |
|------------------------------------|---|----------------|
| 14.1. UN number | 1993 | |
| 14.2. UN proper shipping name | FLAMMABLE LIQUID, N.O.S. (contains acetone) | |
| 14.3. Transport hazard class(es) | IMDG Class | 3 |
| | IMDG Subsidiary Hazard | Not Applicable |
| 14.4. Packing group | II | |
| 14.5. Environmental hazard | Not Applicable | |
| 14.6. Special precautions for user | EMS Number | F-E, S-E |
| | Special provisions | 274 |
| | Limited Quantities | 1 L |

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 |
|--------------|---------------|
| acetone | Not Available |

14.7.3. Transport in bulk in accordance with the IGC Code

| Product name | Ship Type |
|--------------|---------------|
| acetone | Not Available |

If packed as Chemical kits the following classification may be considered if all ICAO/IATA transport requirements are met: Chemical Kit UN3316 - Class 9, SP A44 & A163.

SECTION 15 Regulatory information

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

This substance can be managed under the controls specified in the Transfer Notice or alternatively it may be managed using the conditions specified in an applicable Group Standard.

| HSR Number | Group Standard |
|---------------------|--|
| HSR002495(Proposed) | Additives, Process Chemicals and Raw Materials (Flammable) Group Standard 2020 |

Please refer to Section 8 of the SDS for any applicable tolerable exposure limit or Section 12 for environmental exposure limit.

acetone is found on the following regulatory lists

- New Zealand Approved Hazardous Substances with controls
- New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals
- New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals - Classification Data
- New Zealand Inventory of Chemicals (NZIoC)
- New Zealand Workplace Exposure Standards (WES)

Stae

Additional Regulatory Information

Not Applicable

Hazardous Substance Location

Subject to the Health and Safety at Work (Hazardous Substances) Regulations 2017.

| Hazard Class | Quantity (Closed Containers) | Quantity (Open Containers) |
|--------------|---|----------------------------|
| 3.1B | 100 L in containers more than 5 L | 50 L |
| 3.1B | 250 L in containers up to and including 5 L | 50 L |

Certified Handler

Subject to Part 4 of the Health and Safety at Work (Hazardous Substances) Regulations 2017.

| Class of substance | Quantities |
|--------------------|----------------|
| Not Applicable | Not Applicable |

Refer Group Standards for further information

Maximum quantities of certain hazardous substances permitted on passenger service vehicles

Subject to Regulation 13.14 of the Health and Safety at Work (Hazardous Substances) Regulations 2017.

| Hazard Class | Gas (aggregate water capacity in mL) | Liquid (L) | Solid (kg) | Maximum quantity per package for each classification |
|--------------|--------------------------------------|------------|------------|--|
| 6.5A or 6.5B | 120 | 1 | 3 | |
| 3.1B | | | | 1 L |

Tracking Requirements

Not Applicable

National Inventory Status

| National Inventory | Status |
|--|---|
| Australia - AIIIC / Australia Non-Industrial Use | Yes |
| Canada - DSL | Yes |
| Canada - NDSL | No (acetone) |
| 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 - FBEPH | 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. These ingredients may be exempt or will require registration. |

SECTION 16 Other information

| | |
|---------------|------------|
| Revision Date | 20/08/2021 |
| Initial Date | 16/11/2015 |

SDS Version Summary

| Version | Date of Update | Sections Updated |
|---------|----------------|--|
| 6.1 | 01/11/2019 | One-off system update. NOTE: This may or may not change the GHS classification |
| 7.1 | 20/08/2021 | Classification change due to full database hazard calculation/update. |

Other information

Classification of the preparation and its individual components has drawn on official and authoritative sources as well as independent review by SDI Limited 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

Continued...

- 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

The information contained in the Safety Data Sheet is based on data considered to be accurate, however, no warranty is expressed or implied regarding the accuracy of the data or the results to be obtained from the use thereof.

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