# Safety Data Sheet

SOUDAL

## Hazardous, Dangerous Goods

## Section 1 | IDENTIFICATION OF CHEMICAL PRODUCT AND COMPANY

| Code | Description | Size | Colour |
|---|---|---|---|
| 145006 | Soudafoam MAXTWO HFO HD Part B | 6 kg | Champagne<br>2-component product |

| | | | | |
|---|---|---|---|---|
| **Recommended use:** | | | | Sealant |
| **Group Standard** | | | | HSR002679 |
| **UN Number, Proper Shipping Name and Packaging Group** | | | | UN 3500<br>Chemicals under Pressure |
| **Supplier Contact details** | **Soudal Pty Ltd** | Telephone: **1300 507 011** | **Soudal Ltd** | Freephone: **0800 70 10 80** |
| | 75 Owen Street | ABN: 50 1591 240 53 | 134 Kohia Drive | Phone: 07 847 5540 |
| | Glendenning | | Horotiu | |
| | NSW 2761 | Email: soudlinfo@soudal.com.au | Hamilton | Email: sales@soudal.co.nz |
| | Australia | Website: www.soudal.com.au | New Zealand | Website: www.soudal.co.nz |

**New Zealand POISON CENTRE NUMBER: 0800764 766(24 hours)**

**Australia POISON CENTRE 131126**

**Australia Emergency Telephone number: 1300 507 011**

## Section 2 | HAZARD IDENTIFICATION

**Statement of Hazardous Nature**

This product is classified as: **HAZARDOUS SUBSTANCE** according to the criteria of GHS v7 & WHS Regulations.
**REGULATED** under NZS5433:2020 Transport of Dangerous Goods on Land & ADG

**Poison Schedule:** Unknown

**Hazard Classification**

| | |
|---|---|
| **Compressed Gas Under Pressure** | |
| **Acute Inhalation Toxicity** | **Category 4** |
| **Skin Irritation** | **Category 2** |
| **Eye Irritation** | **Category 2** |
| **Respiratory Sensitisation** | **Category 1** |
| **Skin Sensitisation** | **Category 1** |
| **STOT – RE** | **Category 1** |
| **STOT – SE RTI** | **Category 3** |

**Label Elements**

**Signal Word** **DANGER**

**Hazard Statements**

| | |
|---|---|
| H280 | Contains gas under pressure. May explode if heated |
| H332 | Harmful if inhaled |
| H315 | Causes skin irritation |
| H319 | Causes serious eye irritation |
| H334 | May cause allergy or asthma symptoms or breathing difficulties if inhaled |
| H317 | May cause an allergic skin reaction |
| H351 | Suspected of causing cancer |
| H372 | Causes damage to organs through prolonged or repeated exposure |
| H335 | May cause respiratory irritation |

**Supplementary Statements**

**Precautionary Statements | Prevention**

| | |
|---|---|
| P101 | Keep out of reach of children |
| P102 | Read label before use |
| P202 | Do not handle until all safety precautions have been read and understood |
| P260 | Do not breathe gas |
| P271 | Use only outdoors or in a well ventilated place |
| NZ | Beware: Deliberately sniffing of inhaling concentrated contents can be harmful or fatal |
| P280 | Wear protective gloves, protective clothing, eye protection and face protection |
| P284 | In case of inadequate ventilation wear respiratory protection |
| P272 | Contaminated work clothing should not be allowed out of the workplace |
| P264 | Wash all exposed external body areas thoroughly after handling |
| P270 | Do not eat, drink or smoke when using this product |

**Precautionary Statements | Response**

| | |
|---|---|
| P301+P310 | IF SWALLOWED: Immediately call a POISON CENTRE/ Doctor/ Physician/ First Aider |
| P303+P362 | IF ON SKIN: Wash with plenty of water and soap |
| P333+P313 | If skin irritation (or rash) persists: Get medical advice/ attention |
| P362-P364 | 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 |
| P304+P340 | IF INHALED: Remove person to fresh air and keep at rest in a position comfortable for breathing |
| P312 | Call a POISON CENTRE/ Doctor/ Physician/ First Aider if you feel unwell |

**Precautionary Statements | Storage**

| | |
|---|---|
| P405 | Store locked up |
| P410+P403 | Protect from sunlight. Store in a well ventilated place |
| P403+P233 | Store in a well ventilated place. Keep container tightly closed |

**Precautionary Statements | Disposal**

P501 Dispose of contents/ containers in accordance with local regulations

| INGREDIENT | CAS No | WEIGHT % |
|---|---|---|
| Polymethyldiphenyl diisocyanate oligomer | 9016-87-9 | >75 |
| Trans-1,3,3,3-tetrafluoroprop-1-ene | 29118-24-9 | < 25 |
| Ingredients determined to be non-hazardous | | balance |

## Section 3 | COMPOSITION / INFORMATION ON INGREDIENTS

This is a commercial product whose exact ratio of components may vary slightly. Quantities of other non-hazardous ingredients are also possible.

## Section 4 | FIRST AID MEASURES

**General Information:**

You should call The Poisons Information Centre if you feel that you may have been poisoned, burned or irritated by this product. The number is 131126 from anywhere in Australia or 0800 7674766 from anywhere in New Zealand and is available at all times. Have this SDS or product label with you when you call.

**NZ EMERGENCY SERVICES: 111** **AUSTRALIAN EMERGENCY SERVICES: 000**

**Eye contact:**

f product comes in contact with eyes remove the patient from gas source or contaminated area. Take the patient to the nearest eye wash, shower or other source of clean water. Open the eyelid(s) wide to allow the material to evaporate. Gently rinse the affected eye(s) with clean, cool water for at least 15 minutes. Have the patient lie or sit down and tilt the head back. Hold the eyelid(s) open and pour water slowly over the eyeball(s) at the inner corners, letting the water run out of the outer corners. The patient may be in great pain and wish to keep the eyes closed. It is important that the material is rinsed from the eyes to prevent further damage. Ensure that the patient looks up, and side to side as the eye is rinsed in order to better reach all parts of the eye(s) Transport to hospital or doctor. Even when no pain persists and vision is good, a doctor should examine the eye as delayed damage may occur. If the patient cannot tolerate light, protect the eyes with a clean, loosely tied bandage. Ensure verbal communication and physical contact with the patient. DO NOT allow the patient to rub the eyes DO NOT allow the patient to tightly shut the eyes DO NOT introduce oil or ointment into the eye(s) without medical advice DO NOT use hot or tepid water.

**Skin Contact:**

Immediately remove all contaminated clothing, including footwear. Flush skin and hair with running water (and soap if available). Seek medical attention in event of irritation.

**Inhalation:**

Following exposure to gas, remove the patient from the gas source or contaminated area. NOTE: Personal Protective Equipment (PPE), including positive pressure self-contained breathing apparatus may be required to assure the safety of the rescuer. Prostheses such as false teeth, which may block the airway, should be removed, where possible, prior to initiating first aid procedures. If the patient is not breathing spontaneously, administer rescue breathing. If the patient does not have a pulse, administer CPR. If medical oxygen and appropriately trained personnel are available, administer 100% oxygen. Summon an emergency ambulance. If an ambulance is not available, contact a physician, hospital, or Poison Control Centre for further instruction. Keep the patient warm, comfortable and at rest while awaiting medical care. MONITOR THE BREATHING AND PULSE, CONTINUOUSLY. Administer rescue breathing (preferably with a demand-valve resuscitator, bag-valve mask-device, or pocket mask as trained) or CPR if necessary

**Ingestion:**

Not considered a normal route of entry.

**Notes to physician:**

Treat symptomatically.

## Section 5 | FIRE FIGHTING MEASURES

**Suitable extinguishing media:**

Small Fire: Use extinguishing agent suitable for type of surrounding fire

Large Fire: Cool cylinder

DO NOT direct water at source of leak or venting safety devices as icing may occur.

**Fire and Explosion Hazards:**

Combustible. - Moderate fire hazard when exposed to heat or flame. - When heated to high temperatures decomposes rapidly generating vapour which pressures and may then rupture containers with release of flammable and highly toxic isocyanate vapour. - Burns with acrid black smoke and poisonous fumes. - Due to reaction with water producing $CO_2$-gas, a hazardous build-up of pressure could result if contaminated containers are re-sealed. - Combustion yields traces of highly toxic hydrogen cyanide HCN, plus toxic nitrogen oxides $NO_x$ and carbon monoxide

**Special Protective Equipment and Precautions for Firefighters:**

Alert Fire Brigade and tell them location and nature of hazard. Wear breathing apparatus and protective gloves. Fight fire from a safe distance, with adequate cover. Use water delivered as a fine spray to control fire and cool adjacent area. DO NOT approach cylinders suspected to be hot. Cool fire exposed cylinders with water spray from a protected location. If safe to do so, remove cylinders from path of fire.

**Fire Decomposition**

Combustion products include: carbon monoxide (CO), carbon dioxide ($CO_2$), isocyanates, hydrogen cyanide (HCN), other pyrolysis products typical of burning organic material.

**Hazchem Code** 2ZE

## Section 6 | ACCIDENTAL RELEASE MEASURES

**Personal precautions, protective equipment and emergency procedures:**

Refer Section 8

**Environmental Precautions:**

Refer Section 12

**Minor Spills:**

Avoid breathing vapour and any contact with liquid or gas. Protective equipment including respirator should be used. DO NOT enter confined spaces where gas may have accumulated. Increase ventilation. Clear area of personnel. Stop leak only if safe to so do. Remove leaking cylinders to safe place. Release pressure under safe controlled conditions by opening valve. Do not exert excessive pressure on the valve; do not attempt to operate a damaged valve Orientate cylinder so that the leak is gas, not liquid, to minimise rate of leakage Keep area clear of personnel until gas has dispersed.

**Major Spills:**

Avoid contamination with water, alkalies and detergent solutions. Material reacts with water and generates gas, pressurises containers with even drum rupture resulting. DO NOT reseal container if contamination is suspected. Open all containers with care. DO NOT touch the spill material Clear area of all unprotected personnel and move upwind. Alert Emergency Authority and advise them of the location and nature of hazard. Wear breathing apparatus and protective gloves. Prevent by any means available, spillage from entering drains and watercourses. Consider evacuation. Increase ventilation. No smoking or naked lights within area. Stop leak only if safe to so do. Water spray or fog may be used to disperse vapour. DO NOT enter confined space where gas may have collected. Keep area clear until gas has dispersed. Remove leaking cylinders to a safe place. Fit vent pipes. Release pressure under safe, controlled conditions Burn issuing gas at vent pipes. DO NOT exert excessive pressure on valve; DO NOT attempt to operate damaged valve.

## Section 7 | HANDLING & STORAGE

**Handling:**

Suck back of water into the container must be prevented. Do not allow backfeed into the container. · Do NOT drag, slide or roll cylinders - use a suitable hand truck for cylinder movement · Test for leakage with brush and detergent - NEVER use a naked flame. · Do NOT heat cylinder by any means to increase the discharge rate of product from cylinder. · Leaking gland nuts may be tightened if necessary. · If a cylinder valve will not close completely, remove the cylinder to a well-ventilated location (e.g. outside) and, when empty, tag as FAULTY and return to supplier. · Obtain a work permit before attempting any repairs. · DO NOT attempt repair work on lines, vessels under pressure. · Atmospheres must be tested and O.K. before work resumes after leakage

**Storage:**

Cylinders should be stored in a purpose-built compound with good ventilation, preferably in the open. Such compounds should be sited and built in accordance with statutory requirements. The storage compound should be kept clear and access restricted to authorised personnel only. Cylinders stored in the open should be protected against rust and extremes of weather. Cylinders in storage should be properly secured to prevent toppling or rolling. Cylinder valves should be closed when not in use. Where cylinders are fitted with valve protection this should be in place and properly secured. Gas cylinders should be segregated according to the requirements of the Dangerous Goods Act. Preferably store full and empty cylinders separately. Check storage areas for hazardous concentrations of gases prior to entry. Full cylinders should be arranged so that the oldest stock is used first. Cylinders in storage should be checked periodically for general condition and leakage. Protect cylinders against physical damage. Move and store cylinders correctly as instructed for their manual handling.

**Suitable Container:**

Packing as supplied by manufacturer. Cylinder. Check that containers are clearly labelled.

**Storage Incompatibility:**

| | | | | | | |
|---|---|---|---|---|---|---|
| + | X | + | O | + | + | + |

X *Must not be stored together*

0 *May be stored together with specific preventions*

\+ *May be stored together*

## Section 8 | EXPOSURE CONTROLS AND PERSONAL PROTECTION

**National Occupational Exposure Limits:**

| | New Zealand | | Australia | |
|---|---|---|---|---|
| | TWA (mg/m$^3$) | STEL (mg/m$^3$) | TWA (mg/m$^3$) | STEL (mg/m$^3$) |
| **Polymethyldiphenyl diisocyanate** | | | | |
| | 0.02 | 0.07 | 0.02 | 0.07 |

The TWA exposure value is the average airborne concentration of a particular substance when calculated over a normal 8 hour working day for a 5-day working week. The STEL (Short Term Exposure Limit) is an exposure value that may be equalled (but should not be exceeded) for no longer than 15 minutes and should not be repeated more than 4 times per day. There should be at least 60 minutes between successive exposures at the STEL. The term "peak "is used when the TWA limit, because of the rapid action of the substance, should never be exceeded, even briefly.

**Biological Limit Values:**

As per the "National Model Regulations for the Control of Workplace Hazardous Substances (Safe Work Australia)" the ingredients in this material do not have a Biological Limit Allocated.

**Engineering Measures:**

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 98-54-4independent 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.

**Personal Protection Equipment:**

The following Australian Standards will provide general advice regarding safety clothing and equipment:

Respiratory equipment: **AS/NZS 1715**, Protective Gloves: **AS 2161**, Industrial Clothing: **AS 2919**, Industrial Eye Protection: **AS 1336** and **AS/NZS 1337**, Occupational Protective Footwear: **AS/NZS 2210**.

**Eye Protection:**

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:**

Wear chemical protective gloves, e.g. PE/EVAL/PE. Wear safety footwear or safety gumboots, e.g. Rubber Overalls. PVC Apron. PVC protective suit may be required if exposure severe.

**Respiratory Protection:**

Not normally required. Where inadequate ventilation exists then a Type BKAX-P Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent)

**Thermal Protection:**

Gloves are recommended, as gas may cause icing

**Hygiene measures:**

Keep away from food, drink and animal feeding stuffs. When using do not eat, drink or smoke. Wash hands prior to eating, drinking or smoking. Avoid contact with clothing. Avoid eye contact and repeated or prolonged skin contact. Avoid inhalation of dust. Ensure that eyewash stations and safety showers are close to the workstation location.

## Section 9 | PHYSICAL & CHEMICAL PROPERTIES

| | |
|---|---|
| **Physical State:** | Compresseed gas |
| **Colour:** | Colourless |
| **Odour:** | Characteristic |
| **Odour threshold:** | No data |
| **Freezing/ Melting Point/Range (°C):** | Not available |
| **Boiling Point/Range (°C):** | Not available |
| **Flammability:** | Not available |
| **Lower Explosive Limit (%):** | Not available |
| **Upper Explosive Limit (%):** | Not available |
| **Flash Point (°C):** | Not available |
| **Autoignition Temp (°C):** | Not available |
| **Decomposition Temp (°C):** | Not available |
| **SADT (°C):** | Not applicable |
| **pH:** | Not applicable |
| **Dynamic viscosity:** | Not available |

| | |
|---|---|
| **Kinematic viscosity:** | Not available |
| **Water Solubility:** | Immiscible |
| **Solubility:** | Not available |
| **Coeff Octanol/ water distribution:** | Not available |
| **Vapour Pressure (kPa):** | Not available |
| **Specific Gravity (g/cm$^3$):** | 1.23 |
| **Relative Vapour Density:** | Not available |
| **Volatiles (%):** | Not available |
| **Total VOC:** | Not available |
| **Evaporation Rate:** | Not available |
| **Explosive Properties:** | No chemical group associated with explosive properties |
| **Oxidising Properties:** | No chemical group associated with oxidizing properties |
| **Corrosive Properties:** | No chemical group associated with corrosive properties |

## Section 10 | STABILITY & REACTIVITY

**Reactivity:**

Refer Section 7

**Chemical Stability:**

Unstable in the presence of incompatible materials. Product is considered stable. Hazardous polymerization will not occur.

**Conditions to Avoid:**

Refer Section 7

**Incompatibilities:**

Refer Section 7

**Polymerisation:**

This product will not undergo polymerization reactions

**Hazardous Decomposition Products:**

Refer Section 5

## Section 11 | TOXICOLOGICAL INFORMATION

**Inhalation:**

The material can cause respiratory irritation in some persons. The body's response to such irritation can cause further lung damage. Inhalation of non-toxic gases may cause: CNS effects: headache, confusion, dizziness, stupor, seizures and coma; respiratory: shortness of breath and rapid breathing; cardiovascular: collapse and irregular heartbeats; gastrointestinal: mucous membrane irritation, nausea and vomiting The vapour/mist may be highly irritating to the upper respiratory tract and lungs; the response may be severe enough to produce bronchitis and pulmonary oedema. Pulmonary sensitisation may produce asthmatic reactions ranging from minor breathing difficulties to severe allergic attacks; this may occur following a single acute exposure or may develop without warning for several hours after exposure. Sensitized people can react to very low doses and should not be allowed to work in situations allowing exposure to this material. Continued exposure of sensitised persons may lead to possible long term respiratory impairment. Inhalation hazard is increased at higher temperatures

**Ingestion:**

Not normally a hazard due to physical form of product. Considered an unlikely route of entry in commercial/industrial environments Accidental ingestion of the material may be seriously damaging to the health of the individual; animal experiments indicate that ingestion of less than 40 gram may be fatal.

**Skin Contact:**

Skin contact with the material may damage the health of the individual; systemic effects may result following absorption.

Open cuts, abraded or irritated skin should not be exposed to this material Entry into the bloodstream 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. This material can cause inflammation of the skin on contact in some persons.

**Eye Contact:**

Not considered to be a risk because of the extreme volatility of the gas. This material may produce eye irritation in some persons and produce eye damage 24 hours or more after instillation. Moderate inflammation may be expected with redness; conjunctivitis may occur with prolonged exposure

**Chronic Health Effects:**

There has been concern that this material can cause cancer or mutations, but there is not enough data to make an assessment. Long-term exposure to respiratory irritants may result in airways disease, involving difficulty breathing and related whole-body problems. Inhaling this product is more likely to cause a sensitisation reaction in some persons compared to the general population. Skin contact with the material is more likely to cause a sensitisation reaction in some persons compared to the general population. Toxic: danger of serious damage to health by prolonged exposure through inhalation, in contact with skin and if swallowed. This material can cause serious damage if one is exposed to it for long periods. It can be assumed that it contains a substance which can produce severe defects. Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure. This product contains a polymer with a functional group considered to be of high concern. Persons with a history of asthma or other respiratory problems or are known to be sensitised, should not be engaged in any work involving the handling of isocyanates. The chemistry of reaction of isocyanates, as evidenced by MDI, in biological milieu is such that in the event of a true exposure of small MDI doses to the mouth, reactions will commence at once with biological macromolecules in the buccal region and will continue along the digestive tract prior to reaching the stomach. Reaction products will be a variety of polyureas and macromolecular conjugates with for example mucus, proteins and cell components. This is corroborated by the results from an MDI inhalation study. Following an inhalation exposure of rats to radiolabelled MDI, 79% of the dose was excreted in faeces. The faecal excretion in these animals was considered entirely due to ingestion of radioactivity from grooming and ingestion of deposited material from the nasopharangeal region via the mucociliary escalator, i.e. not following systemic absorption. The faecal radioactivity was tentatively identified as mixed molecular weight polyureas derived from MDI. Diamine was not present. Thus, for MDI and diisocyanates in general the oral gavage dosing route is inappropriate for toxicological studies and risk assessment. It is expected that oral gavage dosing will result in a similar outcome to that produced by TDI or MDI, that is (1) reaction with stomach contents and (2) polymerization to solid polyureas. Reaction with stomach contents is very plausibly described in case reports of accidental ingestion of polymeric MDI based glue in domestic animals. Extensive polymerization and $CO_2$ liberation resulting in an expansion of the gastric content is described in the stomach, without apparent acute chemical toxicity Polyurea formation in organic and aqueous phases has been described. In this generally accepted chemistry of hydrolysis of an isocyanate the initially produced carbamate decarboxylates to an amine which. The amine, as a reactive intermediate, then reacts very readily with the present isocyanate to produce a solid and inert polyurea. This urea formation acts as a pH buffer in the stomach, thus promoting transformation of the diisocyanate into polyurea, even under the acidic conditions. At the resorbtive tissues in the small intestine, these high molecular reaction products are likely to be of very low bioavailability, which is substantiated by the absence of systemic toxicity in acute oral bioassays with rats at the OECD limit dose ($LC_{50}$>2 g/kg bw). The respiratory tract may be regarded as the main entry for systemically available isocyanates as evidenced following MDI exposures. A detailed summary on urinary, plasma and in vitro metabolite studies is provided below. Taken together, all available studies provide convincing evidence that MDI-protein adduct and MDI-metabolite formation proceeds: via formation of a labile isocyanate glutathione (GSH)-adduct, then transfer to a more stable adduct with larger proteins, and without formation of free MDA. MDA reported as a metabolite is actually formed by analytical workup procedures (strong acid or base hydrolysis) and is not an identified metabolite in urine or blood Animal testing shows that polymeric MDI can damage the nasal cavities and lungs, causing inflammation.and increased cell growth

| Ingredient | Oral $LD_{50}$ | Dermal $LD_{50}$ | Inhalation $LC_{50}$ |
|---|---|---|---|
| ATE | | | |
| Polymethyldiphenyl diisocyanate | 43,000 mg/kg | >9,400 mg/kg | 0.49 mg/L/4hr |
| Trans-1,3,3,3-tetrafluoroprop-1-ene | | | >1,157 ppm/4hr |

**Classification**

| | |
|---|---|
| Acute Oral Toxicity | not classified |

| | |
|---|---|
| Acute Dermal Toxicity | not classified |
| Acute Inhalation Toxicity | Category 4 |
| Skin Corrosion/Irritation | Category 2 |
| Eye Corrosion/Irritation | Category 2 |
| Respiratory Sensitisation | Category 1 |
| Skin Sensitisation | Category 1 |
| Germ Cell Mutagenicity | not classified |
| Carcinogenicity | Category 2 |
| Reproductive Toxicity | not classified |
| STOT – SE | not classified |
| STOT – RE | Category 1 |
| Aspiration Hazard | not classified |

## Section 12 | ECOLOGICAL INFORMATION

| Ingredient | Fish | Crustacea | Algae |
|---|---|---|---|
| ATE | | | |
| Trans-1,3,3,3-tetrafluoroprop-1-ene | $LC_{50\ 96hr}$ >117 mg/L | $EC_{50\ 48hr}$ >160 mg/L | $EC_{50\ 72hr}$ >170 mg/L |

Do NOT allow product to come in contact with surface waters or to intertidal areas below the mean high-water mark. Do not contaminate water when cleaning equipment or disposing of equipment wash-waters. Wastes resulting from use of the product must be disposed of on site or at approved waste sites. DO NOT discharge into sewer or waterways.

| | Persistence Water/Soil | Persistence Air | Bioaccumulation | Mobility |
|---|---|---|---|---|
| | | | | |

## Section 13 | DISPOSAL CONSIDERATIONS

Containers may still present a chemical hazard/ danger when empty. Return to supplier for reuse/ recycling if possible.

Otherwise: If container cannot 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. Legislation addressing waste disposal requirements may differ by country, state and/or territory. Each user must refer to laws operating in their area. In some areas, certain wastes must be tracked. A Hierarchy of Controls seems to be common - the user should investigate: Reduction | Reuse | Recycling | Disposal (if all else fails)

This material may be recycled if unused, or if it has not been contaminated so as to make it unsuitable for its intended use. If it has been contaminated, it may be possible to reclaim the product by filtration, distillation or some other means. Shelf-life considerations should also be applied in making decisions of this type. Note that properties of a material may change in use, and recycling or reuse may not always be appropriate. 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.

## Section 14 | TRANSPORT CONSIDERATIONS

| | |
|---|---|
| Marine Pollutant | No |
| HAZCHEM | **2ZE** |

**Land Transport UNDG**

| | |
|---|---|
| UN Number | **3500** |
| Shipping Name | **Chemicals under Pressure, N.O.S.** (contains 1,3,3,3-tetrafluoropropene) |
| Class or division | **2.2** |
| Subsidiary Risk | Not applicable |
| UN Packing Group | Not applicable |
| Environmental Hazard | Not applicable |
| Special Provisions | **274 362** |
| Limited Quantities | **0** |

**Air Transport IATA**

| | |
|---|---|
| UN/ID Number | **3500** |
| Shipping Name | **Chemicals under Pressure, N.O.S.** (contains 1,3,3,3-tetrafluoropropene) |
| ICAO/IATA Class | **2.2** |
| ICAO/IATA Subrisk | Not applicable |
| ERG Code | **2L** |
| Packing Group | Not applicable |
| Environmental Hazard | Not applicable |
| Special provision | **A187** |
| Cargo only | |
| Packing instructions | **218** |
| Maximum Qty/pack | **150 Kg** |
| Passenger and Cargo | |
| Packing instructions | **218** |
| Maximum Qty/pack | **75 Kg** |
| Passenger & Cargo Limited Quantity | |
| Packing instructions | **Forbidden** |
| Maximum Qty/pack | **Forbidden** |

**Marine Transport IMDG**

| | |
|---|---|
| UN Number | **3500** |
| Shipping Name | **Chemicals under Pressure, N.O.S.** (contains 1,3,3,3-tetrafluoropropene) |
| IMDG Class | **2.2** |
| IMDG Subrisk | Not applicable |
| UN Packing Group | Not applicable |
| Environmental Hazard | Not applicable |
| EmS Number | **F-C S-V** |
| Special provisions | **274 362** |
| Limited quantities | **0** |

## Section 15 | REGULATORY INFORMATION

**HSNO approval number and Group Standard:**

**HSR002679 Surface Coatings & Colourants Carcinogenic**

| Condition | Requirement |
|---|---|
| **SDS** | Required |
| **Emergency plan** | Required when quantities exceed 100 Lt |
| **Certified handler** | Not required |
| **Tracking** | Not applicable |
| **Bunding and secondary containment** | Not applicable |
| **Signage** | Required when quantities exceed 100 Lt |
| **Location Compliance certificate** | Not required |
| **Hazardous Atmosphere Zone** | Not applicable |
| **Fire extinguisher** | Not required |

National Inventories:

| | | |
|---|---|---|
| Australia AIIC non-industrial use | | Yes |
| Canada | DSL | Yes |
| | NDSL | No |
| China | IECSC | Yes |
| EU | EINEC/ELINCS/NLP | No |
| Japan | ENCS | Yes |
| Korea | KECI | Yes |
| New Zealand | NZIOC | Yes |
| Philippines | PICCS | No |
| US | TSCA | Yes |
| Taiwan | TCSI | Yes |
| Mexico | INSQ | No |
| Vietnam | NCI | Yes |
| Russia | FBEPH | No |

This material is not subject to the following international agreements:

| | |
|---|---|
| Montreal Protocol Ozone Depleting Substances | Not applicable |
| Stockholm Convention Persistent Organic Pollutants | Not applicable |
| Rotterdam Convention Prior Informed Consent | Not applicable |
| Kyoto Protocol Greenhous Gases | Not applicable |
| Basel Convention Hazardous Waste | Not applicable |

## Section 16 | OTHER INFORMATION

**Revision History (**valid for five years)

June 2025 Joint format

**This SDS contains only safety-related information. For other data see product literature.**

Please read all labels carefully before using product.

**Acronyms:**

| | |
|---|---|
| **AICIS** | Australian Inventory of Industrial Chemicals |
| **ADG** | Australian Dangerous Goods |

| | |
|---|---|
| **CAS number** | Chemical Abstracts Service Registry Number |
| **Hazchem Code** | Emergency action code of numbers and letters that provide information to emergency services especially fire-fighters. |
| **IARC** | International Agency for Research on Cancer |
| **NOS** | Not otherwise specified |
| **STEL** | Short term Exposure Limit |
| **TWA** | Time Weighted Average |
| **UN Number** | United Nations Number |
| **WES** | Workplace Exposure Standard |

**References**

Chemical properties and GHS classifications derived from the New Zealand chemical classification information database (CCID). www.epa.govt.nz.

Workplace exposure limits derived from Workplace Exposure Standards and Biological Exposure Indices 15th Edition (February 2025).



This SDS was prepared by Collievale Enterprises Ltd in accord with the Safe Work Australia – Preparation of safety datasheets for hazardous chemicals Code of Practice July 2020 and the Hazardous Substances (Safety Data Sheets) Notice 2020
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End of SDS