



# HVAC Leak Detector

## CRC Industries (CRC Industries New Zealand)

Chemwatch Hazard Alert Code: 2

Chemwatch: 5452-12

Version No: 3.1

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

Initial Date: 10/02/2021

Revision Date: 04/04/2025

Print Date: 07/06/2026

S.GHS.NZL.EN

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

#### Product Identifier

Product name	HVAC Leak Detector
Chemical Name	Not Applicable
Synonyms	1752429
Proper shipping name	AEROSOLS
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	Cleaning and degreasing solution. Application is by spray atomisation from a hand held aerosol pack
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#### Details of the manufacturer or importer of the safety data sheet

Registered company name	CRC Industries (CRC Industries New Zealand)
Address	10 Highbrook Drive East Tamaki Auckland New Zealand
Telephone	+64 9 272 2700
Fax	+64 9 274 9696
Website	<a href="http://www.crc.co.nz">www.crc.co.nz</a>
Email	- No EMAL ID NEEDED for NZ - JACK

#### Emergency telephone number

Association / Organisation	CRC Industries (CRC Industries New Zealand)	CHEMWATCH EMERGENCY RESPONSE (24/7)
Emergency telephone number(s)	NZ Poisons Centre 0800 POISON (0800 764 766)	+64 800 700 112 (ID#: 5452-12)
Other emergency telephone number(s)	111 (NZ Emergency Services)	+61 3 9573 3188

### SECTION 2 Hazards identification

#### Classification of the substance or mixture

Classification [1]	Aerosols, Hazard Category 3, Serious Eye Damage/Eye Irritation Category 2, Reproductive Toxicity Category 2, Specific Target Organ Toxicity - Repeated Exposure Category 2, Hazardous to the Aquatic Environment Long-Term Hazard Category 2
Legend:	1. Classified by Chemwatch; 2. Classification drawn from CCID EPA NZ; 3. Classification drawn from Regulation (EU) No 1272/2008 - Annex VI
Determined by Chemwatch using GHS/HSNO criteria	6.4A, 6.8B, 6.9B, 9.1B

#### Label elements

Hazard pictogram(s)



Signal word **Warning**

#### Hazard statement(s)

<b>H229</b>	Pressurised container: May burst if heated.
<b>H319</b>	Causes serious eye irritation.
<b>H361</b>	Suspected of damaging fertility or the unborn child.
<b>H373</b>	May cause damage to organs through prolonged or repeated exposure.
<b>H411</b>	Toxic to aquatic life with long lasting effects.

#### Precautionary statement(s) Prevention

<b>P210</b>	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
<b>P251</b>	Do not pierce or burn, even after use.
<b>P260</b>	Do not breathe mist/vapours/spray.
<b>P280</b>	Wear protective gloves, protective clothing, eye protection and face protection.

#### Precautionary statement(s) Response

<b>P308+P313</b>	IF exposed or concerned: Get medical advice/ attention.
<b>P305+P351+P338</b>	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
<b>P314</b>	Get medical advice/attention if you feel unwell.
<b>P337+P313</b>	If eye irritation persists: Get medical advice/attention.

#### Precautionary statement(s) Storage

<b>P405</b>	Store locked up.
<b>P410+P412</b>	Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

#### Precautionary statement(s) Disposal

<b>P501</b>	Dispose of contents/container to authorised hazardous or special waste collection point in accordance with any local regulation.
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No further product hazard information.

## SECTION 3 Composition / information on ingredients

### Substances

See section below for composition of Mixtures

### Mixtures

CAS No	%[weight]	Name
10024-97-2	1-5	<u>nitrous oxide</u>
110-25-8	0.25-2.5	<u>oleoylsarcosine</u>
68955-55-5	0-1	<u>(C12-18)alkyldimethylamine oxide</u>
7732-18-5	>60	<u>water</u>

**Legend:** 1. Classified by Chemwatch; 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

<b>Eye Contact</b>	If aerosols come in contact with the eyes: <ul style="list-style-type: none"><li>▶ Immediately hold the eyelids apart and flush the eye continuously for at least 15 minutes with fresh running water.</li><li>▶ Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.</li><li>▶ Transport to hospital or doctor without delay.</li></ul>
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	<ul style="list-style-type: none"> <li>▶ Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.</li> </ul>
<b>Skin Contact</b>	<p>If solids or aerosol mists are deposited upon the skin:</p> <ul style="list-style-type: none"> <li>▶ Flush skin and hair with running water (and soap if available).</li> <li>▶ Remove any adhering solids with industrial skin cleansing cream.</li> <li>▶ <b>DO NOT use solvents.</b></li> <li>▶ Seek medical attention in the event of irritation.</li> </ul>
<b>Inhalation</b>	<p>If aerosols, fumes or combustion products are inhaled:</p> <ul style="list-style-type: none"> <li>▶ Remove to fresh air.</li> <li>▶ Lay patient down. Keep warm and rested.</li> <li>▶ Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures.</li> <li>▶ If breathing is shallow or has stopped, ensure clear airway and apply resuscitation, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary.</li> <li>▶ Transport to hospital, or doctor.</li> </ul>
<b>Ingestion</b>	Not considered a normal route of entry.

### Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

## SECTION 5 Firefighting measures

### Extinguishing media

#### SMALL FIRE:

- ▶ Water spray, dry chemical or CO<sub>2</sub>

#### LARGE FIRE:

- ▶ Water spray or fog.

### Special hazards arising from the substrate or mixture

<b>Fire Incompatibility</b>	<ul style="list-style-type: none"> <li>▶ Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result</li> </ul>
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### Advice for firefighters

<b>Fire Fighting</b>	<ul style="list-style-type: none"> <li>▶ Alert Fire Brigade and tell them location and nature of hazard.</li> <li>▶ May be violently or explosively reactive.</li> <li>▶ Wear breathing apparatus plus protective gloves.</li> <li>▶ Prevent, by any means available, spillage from entering drains or water course.</li> </ul>
<b>Fire/Explosion Hazard</b>	<ul style="list-style-type: none"> <li>▶ Non combustible.</li> <li>▶ Not considered to be a significant fire risk.</li> <li>▶ Heating may cause expansion or decomposition leading to violent rupture of containers.</li> <li>▶ Aerosol cans may explode on exposure to naked flames.</li> </ul>

## SECTION 6 Accidental release measures

### Personal precautions, protective equipment and emergency procedures

See section 8

### Environmental precautions

See section 12

### Methods and material for containment and cleaning up

<b>Minor Spills</b>	<ul style="list-style-type: none"> <li>▶ Clean up all spills immediately.</li> <li>▶ Avoid breathing vapours and contact with skin and eyes.</li> <li>▶ Wear protective clothing, impervious gloves and safety glasses.</li> <li>▶ Shut off all possible sources of ignition and increase ventilation.</li> </ul>
<b>Major Spills</b>	<ul style="list-style-type: none"> <li>▶ Clear area of personnel and move upwind.</li> <li>▶ Alert Fire Brigade and tell them location and nature of hazard.</li> <li>▶ May be violently or explosively reactive.</li> <li>▶ Wear breathing apparatus plus protective gloves.</li> </ul>

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

## SECTION 7 Handling and storage

### Precautions for safe handling

<b>Safe handling</b>	<ul style="list-style-type: none"> <li>▶ Avoid skin contact, including inhalation.</li> <li>▶ Wear protective clothing when risk of exposure occurs.</li> </ul>
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	<ul style="list-style-type: none"> <li>▶ Use in a well-ventilated area.</li> <li>▶ Prevent concentration in hollows and sumps.</li> </ul>
<b>Other information</b>	<ul style="list-style-type: none"> <li>▶ Keep dry to avoid corrosion of cans. Corrosion may result in container perforation and internal pressure may eject contents of can</li> </ul>

### Conditions for safe storage, including any incompatibilities

<b>Suitable container</b>	<ul style="list-style-type: none"> <li>▶ Aerosol dispenser.</li> <li>▶ Check that containers are clearly labelled.</li> </ul>
<b>Storage incompatibility</b>	<ul style="list-style-type: none"> <li>▶ Avoid reaction with oxidising agents</li> </ul>

## 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)	nitrous oxide	Nitrous oxide	25 ppm / 45 mg/m3	Not Available	Not Available	Not Available

### Exposure controls

<b>Appropriate engineering controls</b>	<p>Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection.</p> <p>The basic types of engineering controls are:</p> <p>Process controls which involve changing the way a job activity or process is done to reduce the risk.</p> <p>Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment.</p>
<b>Individual protection measures, such as personal protective equipment</b>	
<b>Eye and face protection</b>	<ul style="list-style-type: none"> <li>▶ No special equipment for minor exposure i.e. when handling small quantities.</li> <li>▶ OTHERWISE: For potentially moderate or heavy exposures:</li> <li>▶ Safety glasses with side shields.</li> <li>▶ NOTE: Contact lenses pose a special hazard; soft lenses may absorb irritants and ALL lenses concentrate them.</li> </ul>
<b>Skin protection</b>	See Hand protection below
<b>Hands/feet protection</b>	<ul style="list-style-type: none"> <li>▶ No special equipment needed when handling small quantities.</li> <li>▶ OTHERWISE:</li> <li>▶ For potentially moderate exposures:</li> <li>▶ Wear general protective gloves, eg. light weight rubber gloves.</li> <li>▶ For potentially heavy exposures:</li> <li>▶ Wear chemical protective gloves, eg. PVC. and safety footwear.</li> </ul>
<b>Body protection</b>	See Other protection below
<b>Other protection</b>	<p>No special equipment needed when handling small quantities.</p> <p><b>OTHERWISE:</b></p> <ul style="list-style-type: none"> <li>▶ Overalls.</li> <li>▶ Skin cleansing cream.</li> <li>▶ Eyewash unit.</li> </ul>

### Recommended material(s)

#### GLOVE SELECTION INDEX

Glove selection is based on a modified presentation of the:

**"Forsberg Clothing Performance Index".**

The effect(s) of the following substance(s) are taken into account in the **computer-generated** selection:

HVAC Leak Detector

Material	CPI
BUTYL	A
NEOPRENE	A
VITON	A
NATURAL RUBBER	C
PVA	C

### Respiratory protection

Type ANO-P Filter of sufficient capacity. (AS/NZS 1716 & 1715, EN 143:2000 & 149:2001, ANSI Z88 or national equivalent)

Where the concentration of gas/particulates in the breathing zone, approaches or exceeds the "Exposure Standard" (or ES), respiratory protection is required. Degree of protection varies with both face-piece and Class of filter; the nature of protection varies with Type of filter.

Required Minimum Protection Factor	Half-Face Respirator	Full-Face Respirator	Powered Air Respirator
up to 5 x ES	ANO-AUS / Class 1 P2	-	ANO-PAPR-AUS / Class 1 P2
up to 25 x ES	Air-line*	ANO-2 P2	ANO-PAPR-2 P2
up to 50 x ES	-	ANO-3 P2	-

\* 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.

#### Ansell Glove Selection

Glove — In order of recommendation
AlphaTec® Solvex® 37-185
AlphaTec® 38-612
AlphaTec® 58-008
AlphaTec® 58-530B
AlphaTec® 58-530W
AlphaTec® 58-735
AlphaTec® 79-700
AlphaTec® Solvex® 37-675
DermaShield™ 73-711
MICROFLEX® 63-864

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

50+ x ES	-	Air-line**	-
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^ - 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)

Aerosols, in common with most vapours/ mists, should never be used in confined spaces without adequate ventilation. Aerosols, containing agents designed to enhance or mask smell, have triggered allergic reactions in predisposed individuals.

## SECTION 9 Physical and chemical properties

### Information on basic physical and chemical properties

Appearance	Colourless liquid with very low odour; mixes with water.		
Physical state	Liquid	Relative density (Water = 1)	1
Odour	Not Available	Partition coefficient n-octanol / water	Not Available
Odour threshold	Not Available	Auto-ignition temperature (°C)	Not Applicable
pH (as supplied)	7.5	Decomposition temperature (°C)	Not Available
Melting point / freezing point (°C)	0	Viscosity (cSt)	Not Available
Initial boiling point and boiling range (°C)	100	Molecular weight (g/mol)	Not Applicable
Flash point (°C)	Not Applicable	Taste	Not Available
Evaporation rate	<1	Explosive properties	Not Available
Flammability	Not Applicable	Oxidising properties	Not Available
Upper Explosive Limit (%)	Not Applicable	Surface Tension (dyn/cm or mN/m)	Not Available
Lower Explosive Limit (%)	Not Applicable	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
Heat of Combustion (kJ/g)	Not Available	Ignition Distance (cm)	Not Available
Flame Height (cm)	Not Available	Flame Duration (s)	Not Available
Enclosed Space Ignition Time Equivalent (s/m3)	Not Available	Enclosed Space Ignition Deflagration Density (g/m3)	Not Available

## SECTION 10 Stability and reactivity

Reactivity	See section 7
Chemical stability	▶ Elevated temperatures.

	<ul style="list-style-type: none"> <li>▶ Presence of open flame.</li> <li>▶ Product is considered stable.</li> <li>▶ Hazardous polymerisation will not occur.</li> </ul>
<b>Possibility of hazardous reactions</b>	See section 7
<b>Conditions to avoid</b>	See section 7
<b>Incompatible materials</b>	See section 7
<b>Hazardous decomposition products</b>	See section 5

## SECTION 11 Toxicological information

### Information on toxicological effects

<b>a) Acute Toxicity</b>	Based on available data, the classification criteria are not met.
<b>b) Skin Irritation/Corrosion</b>	Based on available data, the classification criteria are not met.
<b>c) Serious Eye Damage/Irritation</b>	There is sufficient evidence to classify this material as eye damaging or irritating
<b>d) Respiratory or Skin sensitisation</b>	Based on available data, the classification criteria are not met.
<b>e) Mutagenicity</b>	Based on available data, the classification criteria are not met.
<b>f) Carcinogenicity</b>	Based on available data, the classification criteria are not met.
<b>g) Reproductivity</b>	There is sufficient evidence to classify this material as toxic to reproductivity
<b>h) STOT - Single Exposure</b>	Based on available data, the classification criteria are not met.
<b>i) STOT - Repeated Exposure</b>	There is sufficient evidence to classify this material as toxic to specific organs through repeated exposure
<b>j) Aspiration Hazard</b>	Based on available data, the classification criteria are not met.

<b>Inhaled</b>	<p>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.</p> <p>Not normally a hazard due to non-volatile nature of product</p> <p>The vapour is discomforting</p> <p><b>WARNING: Intentional misuse by concentrating/inhaling contents may be lethal.</b></p>
<b>Ingestion</b>	<p>Not normally a hazard due to physical form of product.</p> <p>Considered an unlikely route of entry in commercial/industrial environments Not considered to be a risk because of the extreme volatility of the gas.</p>
<b>Skin Contact</b>	<p>Skin contact is not thought to have harmful health effects (as classified under EC Directives); the material may still produce health damage following entry through wounds, lesions or abrasions.</p> <p>There is some evidence to suggest that this material can cause inflammation of the skin on contact in some persons.</p> <p>Spray mist may produce discomfort</p> <p>Open cuts, abraded or irritated skin should not be exposed to this material</p> <p>Entry into the blood-stream, through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected.</p>
<b>Eye</b>	<p>Not considered to be a risk because of the extreme volatility of the gas.</p> <p>This material causes serious eye irritation.</p>
<b>Chronic</b>	<p>Repeated or long-term occupational exposure is likely to produce cumulative health effects involving organs or biochemical systems.</p> <p>Harmful: 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.</p> <p>Ample evidence from experiments exists that there is a suspicion this material directly reduces fertility.</p> <p>Based on experience with animal studies, exposure to the material may result in toxic effects to the development of the foetus, at levels which do not cause significant toxic effects to the mother.</p> <p>Main route of exposure to the gas in the workplace is by inhalation.</p> <p>Psychological dependency on nitrous oxide may occur . Prolonged as well as intermittent repeated exposure to nitrous oxide may cause megaloblastic haemopoiesis. Impotence associated with nitrous oxide-induced myeloneuropathy has been reported</p> <p>Neurological manifestations similar to subacute combined degeneration of the spinal cord were reported following prolonged heavy exposure to nitrous oxide in 15 patients.</p> <p>Hepatic and renal disease rates are higher in dentists and dental assistants heavily exposed to nitrous oxide than for unexposed practitioners.</p> <p><b>WARNING: Aerosol containers may present pressure related hazards.</b></p>

<b>HVAC Leak Detector</b>	<b>TOXICITY</b>	<b>IRRITATION</b>
	Not Available	Not Available

nitrous oxide	<b>TOXICITY</b>	<b>IRRITATION</b>
	Inhalation (Rat) LC50: >250 ppm4h <sup>[2]</sup>	Not Available
oleoysarcosine	<b>TOXICITY</b>	<b>IRRITATION</b>
	Inhalation (Rat) LC50: 0.575 mg/4h <sup>[1]</sup> Oral (Rat) LD50: >5000 mg/kg <sup>[2]</sup>	Not Available
(C12-18)alkyldimethylamine oxide	<b>TOXICITY</b>	<b>IRRITATION</b>
	dermal (rat) LD50: >2000 mg/kg <sup>[1]</sup> Oral (Rat) LD50: >600 mg/kg <sup>[1]</sup>	Eye: adverse effect observed (irritating) <sup>[1]</sup> Skin: adverse effect observed (irritating) <sup>[1]</sup>
water	<b>TOXICITY</b>	<b>IRRITATION</b>
	Oral (Rat) LD50: >90000 mg/kg <sup>[2]</sup>	Not Available

**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

<b>NITROUS OXIDE</b>	<p>For nitrous oxide: Nitrous oxide is 35 times more soluble than nitrogen. The gas exchanges with nitrogen and diffuses into hollow viscera and body spaces potentially containing air such as pneumothorax, paranasal sinuses and pneumoperitoneum or into the cerebral ventricles following pneumoencephalography. This expands the body of trapped air and increases the pressure within such closed spaces. When administration is discontinued, nitrous oxide is released into the alveoli, diluting the alveolar gases.</p>
<b>OLEOYLSARCOSINE</b>	<p>Asthma-like symptoms may continue for months or even years after exposure to the material ends. This may be due to a non-allergic condition known as reactive airways dysfunction syndrome (RADS) which can occur after exposure to high levels of highly irritating compound. Main criteria for diagnosing RADS include the absence of previous airways disease in a non-atopic individual, with sudden onset of persistent asthma-like symptoms within minutes to hours of a documented exposure to the irritant. Other criteria for diagnosis of RADS include a reversible airflow pattern on lung function tests, moderate to severe bronchial hyperreactivity on methacholine challenge testing, and the lack of minimal lymphocytic inflammation, without eosinophilia.</p> <p>The amino acids alkyl amides are most likely to dissociate into amino acids and fatty acids in the presence of water. Because most of these amino acids and fatty acids are found in the foods we consume daily, oral toxicity is not expected.</p> <p>In turn, skin toxicity would not be expected to be different from oral exposure. Data from previous safety assessments support the notion that these ingredients would not likely cause irritation or sensitization. Testing has also not shown any evidence of light-related toxicity or genetic toxicity.</p> <p>The likelihood of formation of nitrosamines (which cause cancer) is thought to be low.</p> <p>For sarcosine: Motor impairment and respiratory issues have been observed in rats at 10mg/kg. This equates to 800 mg for an 80 kg person. Sarcosine was reported to activate prostate cancer cells and to indicate the malignancy of prostate cancer cells when measured in urine Sarcosine was identified as a differential metabolite that was greatly increased during prostate cancer progression to metastasis and could be detected in urine. Sarcosine levels seemed to control the invasiveness of the cancer. This conclusion has been disputed</p> <p>Sarcosine has been investigated in relation to schizophrenia.</p> <p>Toxicological data is available and well documented for representative toluene, xylene and cumene sulfonates (including sodium, potassium, ammonium and calcium salts). These data show that hydrotropes have low toxicity for all routes, do not cause genetic damage, show no evidence of causing cancer in long-term skin studies, and have not caused birth defects, developmental defects or reduced fertility.</p> <p>&lt;</p>
<b>(C12-18)ALKYLDIMETHYLAMINE OXIDE</b>	Amine oxides are readily metabolised and excreted after oral intake. They produced no mortality or skin sensitization on exposure but caused reversible irritation of the eyes, skin and airways. They may also cause cataracts. Repeat dosing showed no abnormal changes except for diarrhoea and weight loss.
<b>(C12-18)ALKYLDIMETHYLAMINE OXIDE &amp; WATER</b>	No significant acute toxicological data identified in literature search.

<b>Acute Toxicity</b>	✗	<b>Carcinogenicity</b>	✗
<b>Skin Irritation/Corrosion</b>	✗	<b>Reproductivity</b>	✓
<b>Serious Eye Damage/Irritation</b>	✓	<b>STOT - Single Exposure</b>	✗
<b>Respiratory or Skin sensitisation</b>	✗	<b>STOT - Repeated Exposure</b>	✓
<b>Mutagenicity</b>	✗	<b>Aspiration Hazard</b>	✗

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

## SECTION 12 Ecological information

### Toxicity

	Endpoint	Test Duration (hr)	Species	Value	Source
HVAC Leak Detector	Not Available	Not Available	Not Available	Not Available	Not Available
nitrous oxide	Not Available	Not Available	Not Available	Not Available	Not Available
oleoysarcosine	NOEC(ECx)	504h	Crustacea	0.102mg/L	2
	EC50	48h	Crustacea	0.43mg/l	2
	LC50	96h	Fish	>0.43mg/l	2
(C12-18)alkyldimethylamine oxide	EC50	72h	Algae or other aquatic plants	0.015mg/l	2
	EC50	48h	Crustacea	2.4mg/l	2
	LC50	96h	Fish	1.26mg/l	2
	EC10(ECx)	72h	Algae or other aquatic plants	0.002mg/l	2
water	Not Available	Not Available	Not Available	Not Available	Not Available
<b>Legend:</b>	Extracted from 1. IUCLID Toxicity Data 2. Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity 3. US EPA, Ecotox database - Aquatic Toxicity Data 4. ECETOC Aquatic Hazard Assessment Data 5. NITE (Japan) - Bioconcentration Data 6. METI (Japan) - Bioconcentration Data 7. Vendor Data				

Toxic to aquatic organisms.

**DO NOT** discharge into sewer or waterways.

### Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
oleoysarcosine	LOW	LOW
water	LOW	LOW

### Bioaccumulative potential

Ingredient	Bioaccumulation
nitrous oxide	LOW (LogKOW = 0.36)
oleoysarcosine	HIGH (LogKOW = 6.83)
(C12-18)alkyldimethylamine oxide	HIGH (LogKOW = 4.67)
water	LOW (LogKOW = -1.38)

### Mobility in soil

Ingredient	Mobility
oleoysarcosine	LOW (Log KOC = 17090)

## SECTION 13 Disposal considerations

### Waste treatment methods

Product / Packaging disposal	
	<ul style="list-style-type: none"> <li>▶ Consult State Land Waste Management Authority for disposal.</li> <li>▶ Discharge contents of damaged aerosol cans at an approved site.</li> <li>▶ Allow small quantities to evaporate.</li> <li>▶ <b>DO NOT</b> incinerate or puncture aerosol cans.</li> </ul>

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.

## SECTION 14 Transport information

### Labels Required

	
<b>Marine Pollutant</b>	
<b>HAZCHEM</b>	Not Applicable

### Land transport (UN)

14.1. <b>UN number or ID number</b>	1950	
14.2. <b>UN proper shipping name</b>	AEROSOLS	
14.3. <b>Transport hazard class(es)</b>	Class	2.2
	Subsidiary Hazard	Not Applicable
14.4. <b>Packing group</b>	Not Applicable	
14.5. <b>Environmental hazard</b>	Environmentally hazardous	
14.6. <b>Special precautions for user</b>	Special provisions	63; 190; 277; 327; 344; 381
	Limited quantity	1000ml

### Air transport (ICAO-IATA / DGR): NOT REGULATED FOR TRANSPORT OF DANGEROUS GOODS

### Sea transport (IMDG-Code / GGVSee)

14.1. <b>UN number</b>	1950	
14.2. <b>UN proper shipping name</b>	AEROSOLS	
14.3. <b>Transport hazard class(es)</b>	IMDG Class	2.2
	IMDG Subsidiary Hazard	Not Applicable
14.4. <b>Packing group</b>	Not Applicable	
14.5. <b>Environmental hazard</b>	Marine Pollutant	
14.6. <b>Special precautions for user</b>	EMS Number	F-D, S-U
	Special provisions	63 190 277 327 344 381 959
	Limited Quantities	1000 ml

### 14.7. Maritime transport in bulk according to IMO instruments

#### 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
nitrous oxide	Not Applicable
oleoysarcosine	Not Applicable
(C12-18)alkyldimethylamine oxide	Not Applicable

Product name	Group
water	Not Applicable

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

Product name	Ship Type
nitrous oxide	Not Applicable
oleoysarcosine	Not Applicable
(C12-18)alkyldimethylamine oxide	Not Applicable
water	Not Applicable

## SECTION 15 Regulatory information

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

This substance is to be managed using the conditions specified in an applicable Group Standard

HSR Number	Group Standard
HSR002519	Aerosols Subsidiary Hazard Group Standard 2020

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

#### nitrous oxide is found on the following regulatory lists

- Chemical Footprint Project - Chemicals of High Concern List
- 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)

#### oleoysarcosine is found on the following regulatory lists

- 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 Land Transport Rule: Dangerous Goods 2005 - Schedule 1 Quantity limits for dangerous goods

#### (C12-18)alkyldimethylamine oxide is found on the following regulatory lists

- New Zealand Inventory of Chemicals (NZIoC)
- New Zealand Land Transport Rule: Dangerous Goods 2005 - Schedule 1 Quantity limits for dangerous goods

#### water is found on the following regulatory lists

- New Zealand Inventory of Chemicals (NZIoC)

### Additional Regulatory Information

Not Applicable

### Hazardous Substance Location

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

Hazard Class	Quantities
Not Applicable	Not Applicable

### 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
Not Applicable	Not Applicable	Not Applicable	Not Applicable	Not Applicable

## Tracking Requirements

Not Applicable

## National Inventory Status

National Inventory	Status
Australia - AIC / Australia Non-Industrial Use	Yes
Canada - DSL	Yes
Canada - NDSL	No (nitrous oxide; oleoysarcosine; (C12-18)alkyldimethylamine oxide; water)
China - IECSC	Yes
Europe - EINEC / ELINCS / NLP	Yes
Japan - ENCS	Yes
Korea - KECI	No ((C12-18)alkyldimethylamine oxide)
New Zealand - NZIoC	Yes
Philippines - PICCS	Yes
USA - TSCA	All chemical substances in this product have been designated as TSCA Inventory 'Active'
Taiwan - TCSI	Yes
Mexico - INSQ	No ((C12-18)alkyldimethylamine oxide)
Vietnam - NCI	Yes
Russia - FBEPH	No (oleoysarcosine; (C12-18)alkyldimethylamine oxide)
UAE - Control List (Banned/Restricted Substances)	No (nitrous oxide; oleoysarcosine; (C12-18)alkyldimethylamine oxide; water)
<b>Legend:</b>	<p>Yes = All CAS declared ingredients are on the inventory</p> <p>No = One or more of the CAS listed ingredients are not on the inventory. These ingredients may be exempt or will require registration.</p>

## SECTION 16 Other information

<b>Revision Date</b>	04/04/2025
<b>Initial Date</b>	10/02/2021

## SDS Version Summary

Version	Date of Update	Sections Updated
3.1	04/04/2025	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 the Chemwatch Classification committee using available literature references.

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

## Definitions and abbreviations

- ▶ PC - TWA: Permissible Concentration-Time Weighted Average
- ▶ PC - STEL: Permissible Concentration-Short Term Exposure Limit
- ▶ IARC: International Agency for Research on Cancer
- ▶ ACGIH: American Conference of Governmental Industrial Hygienists
- ▶ STEL: Short Term Exposure Limit
- ▶ TEEL: Temporary Emergency Exposure Limit,
- ▶ IDLH: Immediately Dangerous to Life or Health Concentrations
- ▶ ES: Exposure Standard
- ▶ OSF: Odour Safety Factor
- ▶ NOAEL: No Observed Adverse Effect Level
- ▶ LOAEL: Lowest Observed Adverse Effect Level
- ▶ TLV: Threshold Limit Value
- ▶ LOD: Limit Of Detection

- OTV: Odour Threshold Value
- BCF: BioConcentration Factors
- BEI: Biological Exposure Index
- DNEL: Derived No-Effect Level
- PNEC: Predicted no-effect concentration
- MARPOL: International Convention for the Prevention of Pollution from Ships
- IMSBC: International Maritime Solid Bulk Cargoes Code
- IGC: International Gas Carrier Code
- IBC: International Bulk Chemical Code
  
- AIIC: Australian Inventory of Industrial Chemicals
- DSL: Domestic Substances List
- NDSL: Non-Domestic Substances List
- IECSC: Inventory of Existing Chemical Substance in China
- EINECS: European Inventory of Existing Commercial chemical Substances
- ELINCS: European List of Notified Chemical Substances
- NLP: No-Longer Polymers
- ENCS: Existing and New Chemical Substances Inventory
- KECI: Korea Existing Chemicals Inventory
- NZIoC: New Zealand Inventory of Chemicals
- PICCS: Philippine Inventory of Chemicals and Chemical Substances
- TSCA: Toxic Substances Control Act
- TCSI: Taiwan Chemical Substance Inventory
- INSQ: Inventario Nacional de Sustancias Químicas
- NCI: National Chemical Inventory
- FBEPH: Russian Register of Potentially Hazardous Chemical and Biological Substances

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