

Corrofix™ Professional Stainless Steel Cleaner & Protector (Aerosol)

Chemtools Pty Ltd

Chemwatch Hazard Alert Code: 4

Issue Date: **19/04/2023**Print Date: **30/04/2023**S.GHS.AUS/NZ.EN.E

Chemwatch: **5597-61**

Version No: 2.1
Safety Data Sheet according to WHS Regulations (Hazardous Chemicals) Amendment 2020 and ADG requirements
Safety Data Sheet according to the Health and Safety at Work (Hazardous Substances) Regulations 2017

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

Product Identifier

| Product name | Corrofix™ Professional Stainless Steel Cleaner & Protector (Aerosol) |
|----------------------------------|--|
| Chemical Name | Not Applicable |
| 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 | Use according to manufacturer's directions. |
|--------------------------|---|
| | Application is by spray atomisation from a hand held aerosol pack |

Details of the manufacturer or supplier of the safety data sheet

| Registered company name | Chemtools Pty Ltd | Chemtools Pty Ltd |
|-------------------------|---|--|
| Address | Unit 2, 14 - 16 Lee Holm Road St Marys NSW 2760 Australia | 15/62 Factory Road Belfast Christchurch 8051 New Zealand |
| Telephone | 1300 738 250, +61 2 9833 9766 | +64 9 940 2745 |
| Fax | +61 2 9623 3670 | +61 2 9623 3670 |
| Website | www.chemtools.com.au | www.chemtools.co.nz |
| Email | sales@chemtools.com.au | sales@chemtools.com.au |

Emergency telephone number

| Association / Organisation | Poisons Information Centre | National Poisons Centre |
|-----------------------------------|----------------------------|-------------------------|
| Emergency telephone numbers | 13 11 26 | 0800 764 766 |
| Other emergency telephone numbers | Not Available | Not Available |

SECTION 2 Hazards identification

Classification of the substance or mixture

HAZARDOUS CHEMICAL. DANGEROUS GOODS. According to the WHS Regulations and the ADG Code.

| Poisons Schedule | Not Applicable |
|--------------------|--|
| Classification [1] | Aerosols Category 1, Aspiration Hazard Category 1, Skin Corrosion/Irritation Category 2, Serious Eye Damage/Eye Irritation Category 2B, Specific Target Organ Toxicity - Single Exposure (Narcotic Effects) Category 3, Reproductive Toxicity Category 2, Hazardous to the Aquatic Environment Long-Term Hazard Category 2 |
| Legend: | 1. Classified by Chemwatch; 2. Classification drawn from HCIS; 3. Classification drawn from Regulation (EU) No 1272/2008 - Annex VI |

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Label elements

Hazard pictogram(s)









Signal word

Danger

Hazard statement(s)

| AUH044 | Risk of explosion if heated under confinement. |
|-----------|--|
| H222+H229 | Extremely flammable aerosol. Pressurized container: may burst if heated. |
| H304 | May be fatal if swallowed and enters airways. |
| H315 | Causes skin irritation. |
| H320 | Causes eye irritation. |
| H336 | May cause drowsiness or dizziness. |
| H361f | Suspected of damaging fertility. |
| H411 | Toxic to aquatic life with long lasting effects. |

Precautionary statement(s) Prevention

| P201 | Obtain special instructions before use. |
|------|--|
| P210 | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. |
| P211 | Do not spray on an open flame or other ignition source. |
| P251 | Do not pierce or burn, even after use. |
| P271 | Use only outdoors or in a well-ventilated area. |
| P280 | Wear protective gloves and protective clothing. |
| P261 | Avoid breathing mist/vapours/spray. |
| P273 | Avoid release to the environment. |
| P264 | Wash all exposed external body areas thoroughly after handling. |

Precautionary statement(s) Response

| P301+P310 | IF SWALLOWED: Immediately call a POISON CENTER/doctor/physician/first aider. | |
|----------------|--|--|
| P331 | Do NOT induce vomiting. | |
| P308+P313 | IF exposed or concerned: Get medical advice/ attention. | |
| 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. | |
| P337+P313 | If eye irritation persists: Get medical advice/attention. | |
| P391 | Collect spillage. | |
| P302+P352 | IF ON SKIN: Wash with plenty of water and soap. | |
| P304+P340 | IF INHALED: Remove person to fresh air and keep comfortable for breathing. | |
| P332+P313 | If skin irritation occurs: Get medical advice/attention. | |
| P362+P364 | Take off contaminated clothing and wash it before reuse. | |
| | | |

Precautionary statement(s) Storage

| P405 | Store locked up. |
|-----------|--|
| P410+P412 | Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. |
| P403+P233 | Store in a well-ventilated place. Keep container tightly closed. |

Precautionary statement(s) Disposal

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

Considered a Hazardous Substance according to the criteria of the New Zealand Hazardous Substances New Organisms legislation. Classified as Dangerous Goods for transport purposes.

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NFPA 704 diamond

Version No: 2.1



Note: The hazard category numbers found in GHS classification in section 2 of this SDSs are NOT to be used to fill in the NFPA 704 diamond. Blue = Health Red = Fire Yellow = Reactivity White = Special (Oxidizer or water reactive substances)

| Classification [1] | Aerosols Category 1, Aspiration Hazard Category 1, Skin Corrosion/Irritation Category 2, Serious Eye Damage/Eye Irritation Category 2, Specific Target Organ Toxicity - Single Exposure (Narcotic Effects) Category 3, Reproductive Toxicity 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 | 2.1.2A, 6.1E (aspiration), 6.3A, 6.4A, 6.8B, 6.9B (narcotic effects), 9.1B |

Label elements

Hazard pictogram(s)









Signal word Danger

Hazard statement(s)

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| H319 | Causes serious eye irritation. |
| H336 | May cause drowsiness or dizziness. |
| H361 | Suspected of damaging fertility or the unborn child. |
| H411 | Toxic to aquatic life with long lasting effects. |

Supplementary Phrases

Not Applicable

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| P251 | Do not pierce or burn, even after use. |
| P271 | Use only outdoors or in a well-ventilated area. |
| P280 | Wear protective gloves, protective clothing, eye protection and face protection. |
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|-----------|--|--|
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Precautionary statement(s) Disposal

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SECTION 3 Composition / information on ingredients

Substances

See section below for composition of Mixtures

Mixtures

| CAS No | %[weight] Name | | | |
|---------------|--|--|--|--|
| 92112-69-1 | <80 | hexanes, mixture of isomers | | |
| 107-83-5 | <30 | 2-methylpentane | | |
| 8042-47-5 | <30 | white mineral oil (petroleum) | | |
| 124-38-9 | <5 | carbon dioxide | | |
| Not Available | balance | Ingredients determined not to be hazardous | | |
| 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

| occupation of mot ala m | |
|-------------------------|---|
| Eye Contact | If aerosols come in contact with the eyes: Immediately hold the eyelids apart and flush the eye continuously for at least 15 minutes with fresh 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. Transport to hospital or doctor without delay. Removal of contact lenses after an eye injury should only be undertaken by skilled personnel. |
| Skin Contact | If solids or aerosol mists are deposited upon the skin: Flush skin and hair with running water (and soap if available). Remove any adhering solids with industrial skin cleansing cream. DO NOT use solvents. Seek medical attention in the event of irritation. |
| Inhalation | If aerosols, fumes or combustion products are inhaled: Remove to fresh air. 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. 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. Transport to hospital, or doctor. |
| Ingestion | Avoid giving milk or oils. Avoid giving alcohol. Not considered a normal route of entry. |

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

Following acute or short term repeated exposures to n-hexane:

- Large quantities of n-hexane are expired by the lungs after vapour exposure (50-60%). Humans exposed to 100 ppm demonstrate an n-hexane biological half life of 2 hours.
- Initial attention should be directed towards evaluation and support of respiration. Cardiac dysrhythmias are a potential complication.

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INGESTION:

• Ipecac syrup should be considered for ingestion of pure hexane exceeding 2-3ml/kg. Extreme caution must be taken to avoid aspiration since small amounts of n-hexane intratracheally, produce a severe chemical pneumonitis.

[Ellenhorn and Barceloux: Medical Toxicology]

BIOLOGICAL EXPOSURE INDEX - BEI

BEIs represent the levels of determinants which are most likely to be observed in specimens collected in a healthy worker who has been exposed to chemicals to the same extent as a worker with inhalation exposure to the Exposure Standard (ES or TLV).

Determinant Index Sampling Time Comments

1. 2,5-hexanedione in urine 5 mg/gm creatinine End of shift NS

2. n-Hexane in end-exhaled air SQ

NS: Non-specific determinant; Metabolite observed following exposure to other materials.

SQ: Semi-quantitative determinant; Interpretation may be ambiguous - should be used as a screening test or confirmatory test.

SECTION 5 Firefighting measures

Extinguishing media

SMALL FIRE:

▶ Water spray, dry chemical or CO2

LARGE FIRE:

Water spray or fog.

Special hazards arising from the substrate or mixture

Fire Incompatibility

Fire Fighting

Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may

Advice for firefighters

- 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.
- If safe, switch off electrical equipment until vapour fire hazard removed.
- Use water delivered as a fine spray to control fire and cool adjacent area.
- ▶ 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.
- Equipment should be thoroughly decontaminated after use.
- Liquid and vapour are highly flammable.
- Severe fire hazard when exposed to heat or flame.
- Vapour forms an explosive mixture with air.
- Severe explosion hazard, in the form of vapour, when exposed to flame or spark.
- Vapour may travel a considerable distance to source of ignition.
- ▶ Heating may cause expansion or decomposition with violent container rupture.
- Aerosol cans may explode on exposure to naked flames.
- ▶ Rupturing containers may rocket and scatter burning materials.
- Hazards may not be restricted to pressure effects.
- ▶ May emit acrid, poisonous or corrosive fumes.
- ▶ On combustion, may emit toxic fumes of carbon monoxide (CO).

Combustion products include:

carbon dioxide (CO2)

other pyrolysis products typical of burning organic material.

May emit clouds of acrid smoke

CARE: Water in contact with hot liquid may cause foaming and a steam explosion with wide scattering of hot oil and possible severe burns. Foaming may cause overflow of containers and may result in possible fire.

SECTION 6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

See section 8

Environmental precautions

Fire/Explosion Hazard

See section 12

Methods and material for containment and cleaning up

Minor Spills

- Clean up all spills immediately.
- Avoid breathing vapours and contact with skin and eyes.

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▶ Shut off all possible sources of ignition and increase ventilation. Wipe up. If safe, damaged cans should be placed in a container outdoors, away from all ignition sources, until pressure has dissipated. Undamaged cans should be gathered and stowed safely.

- Clear area of personnel and move upwind.
- Alert Fire Brigade and tell them location and nature of hazard.

Wear protective clothing, impervious gloves and safety glasses.

- May be violently or explosively reactive.
- Wear breathing apparatus plus protective gloves.
- ▶ Prevent, by any means available, spillage from entering drains or water courses
- ▶ 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.
- Absorb or cover spill with sand, earth, inert materials or vermiculite.
- If safe, damaged cans should be placed in a container outdoors, away from ignition sources, until pressure has dissipated.
- Undamaged cans should be gathered and stowed safely.
- Collect residues and seal in labelled drums for disposal.

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

SECTION 7 Handling and storage

Safe handling

Other information

Major Spills

Precautions for safe handling

The conductivity of this material may make it a static accumulator., A liquid is typically considered nonconductive if its conductivity is below 100 pS/m and is considered semi-conductive if its conductivity is below 10 000 pS/m., Whether a liquid is nonconductive or semi-conductive, the precautions are the same., A number of factors, for example liquid temperature, presence of contaminants, and anti-static additives can greatly influence the conductivity of a liquid.

- 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 or ignition sources.
- Avoid contact with incompatible materials.
- ▶ When handling, **DO NOT** eat, drink or smoke.
- DO NOT incinerate or puncture aerosol cans.
- DO NOT spray directly on humans, exposed food or food utensils.
- 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 are

▶ Keep dry to avoid corrosion of cans. Corrosion may result in container perforation and internal pressure may eject contents of

▶ Store in original containers in approved flammable liquid storage area.

- DO NOT store in pits, depressions, basements or areas where vapours may be trapped.
- No smoking, naked lights, heat or ignition sources. Keep containers securely sealed. Contents under pressure.
- Store away from incompatible materials.
 - Store in a cool, dry, well ventilated area.
 - Avoid storage at temperatures higher than 40 deg C.
 - Store in an upright position.
 - Protect containers against physical damage.
 - Check regularly for spills and leaks.
 - Observe manufacturer's storage and handling recommendations contained within this SDS.

Conditions for safe storage, including any incompatibilities

Aerosol dispenser. Suitable container Check that containers are clearly labelled. ▶ Compressed gases may contain a large amount of kinetic energy over and above that potentially available from the energy of Storage incompatibility reaction produced by the gas in chemical reaction with other substances Avoid reaction with oxidising agents

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- X Must not be stored together
- 0 May be stored together with specific preventions
- + May be stored together

Note: Depending on other risk factors, compatibility assessment based on the table above may not be relevant to storage situations, particularly where large volumes of dangerous goods are stored and handled. Reference should be made to the Safety Data Sheets for each substance or article and risks assessed accordingly.

SECTION 8 Exposure controls / personal protection

Control parameters

Occupational Exposure Limits (OEL)

INGREDIENT DATA

| Source | Ingredient | Material name | TWA | STEL | Peak | Notes |
|---|----------------------------------|------------------------------|----------------------------|----------------------------|------------------|---|
| Australia Exposure Standards | 2-methylpentane | Hexane, other isomers | 500 ppm / 1760 mg/m3 | 3500 mg/m3 / 1000 ppm | Not Available | Not Available |
| Australia Exposure Standards | white mineral oil (petroleum) | Oil mist, refined mineral | 5 mg/m3 | Not Available | Not Available | Not Available |
| New Zealand Workplace Exposure Standards (WES) | white mineral oil (petroleum) | Oil mist, mineral | 5 mg/m3 | 10 mg/m3 | Not Available | (om) - Sampled by a method that does not collect vapour |
| Australia Exposure Standards | carbon dioxide | Carbon dioxide | 5000 ppm / 9000 mg/m3 | 54000 mg/m3 / 30000 ppm | Not Available | Not Available |
| Australia Exposure Standards | carbon dioxide | Carbon dioxide in coal mines | 12500 ppm / 22500 mg/m3 | 54000 mg/m3 / 30000 ppm | Not Available | Not Available |
| New Zealand Workplace Exposure Standards (WES) | carbon dioxide | Carbon dioxide | 5000 ppm / 9000 mg/m3 | 54000 mg/m3 / 30000 ppm | Not Available | Not Available |

Emergency Limits

| Ingredient | TEEL-1 | TEEL-2 | TEEL-3 |
|-------------------------------|-----------|-------------|--------------|
| 2-methylpentane | 1,000 ppm | 11000** ppm | 66000*** ppm |
| white mineral oil (petroleum) | 140 mg/m3 | 1,500 mg/m3 | 8,900 mg/m3 |

| Ingredient | Original IDLH | Revised IDLH |
|-------------------------------|---------------|---------------|
| hexanes, mixture of isomers | Not Available | Not Available |
| 2-methylpentane | Not Available | Not Available |
| white mineral oil (petroleum) | 2,500 mg/m3 | Not Available |
| carbon dioxide | 40,000 ppm | Not Available |

Occupational Exposure Banding

| Ingredient | Occupational Exposure Band Rating | Occupational Exposure Band Limit | |
|-----------------------------|--|----------------------------------|--|
| hexanes, mixture of isomers | ≦ ≤ 0.1 ppm | | |
| Notes: | Occupational exposure banding is a process of assigning chemicals into specific categories or bands based on a chemical's potency and the adverse health outcomes associated with exposure. The output of this process is an occupational exposure band (OEB), which corresponds to a range of exposure concentrations that are expected to protect worker health. | | |

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.

Appropriate engineering controls

Process controls which involve changing the way a job activity or process is done to reduce the risk.

The basic types of engineering controls are:

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.

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General exhaust is adequate under normal conditions. If risk of overexposure exists, wear SAA approved respirator. Correct fit is

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Provide adequate ventilation in warehouse or closed storage areas. 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. Type of Contaminant: Speed: 0.5-1 m/s aerosols, (released at low velocity into zone of active generation) direct spray, spray painting in shallow booths, gas discharge (active generation into zone of rapid 1-2.5 m/s (200-500 f/min.) Within each range the appropriate value depends on: 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 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 Individual protection measures, such as personal protective equipment No special equipment for minor exposure i.e. when handling small quantities. OTHERWISE: For potentially moderate or heavy exposures: Eye and face protection Safety glasses with side shields. • NOTE: Contact lenses pose a special hazard; soft lenses may absorb irritants and ALL lenses concentrate them. Skin protection See Hand protection below ▶ No special equipment needed when handling small quantities. ► OTHERWISE For potentially moderate exposures: Hands/feet protection

- ▶ Wear general protective gloves, eg. light weight rubber gloves.
- ► For potentially heavy exposures:

essential to obtain adequate protection.

Wear chemical protective gloves, eg. PVC. and safety footwear.

Body protection

See Other protection below

No special equipment needed when handling small quantities.

OTHERWISE:

- Overalls
- Skin cleansing cream.
- ▶ Eyewash unit.

Other protection

- Do not spray on hot surfaces.
- The clothing worn by process operators insulated from earth may develop static charges far higher (up to 100 times) than the minimum ignition energies for various flammable gas-air mixtures. This holds true for a wide range of clothing materials
- Avoid dangerous levels of charge by ensuring a low resistivity of the surface material worn outermost.

BRETHERICK: Handbook of Reactive Chemical Hazards.

Respiratory protection

Type AX-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 10 x ES | AX-AUS P2 | - | AX-PAPR-AUS / Class 1 P2 |
| up to 50 x ES | - | AX-AUS / Class 1 P2 | - |
| up to 100 x ES | - | AX-2 P2 | AX-PAPR-2 P2 ^ |

^ - 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

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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 | Liquid aerosol with a characteristic odour; does not mix with water. | | | |
|--|--|---|----------------|--|
| Physical state | Liquid | Relative density (Water = 1) | Not Available | |
| Odour | Characteristic | Partition coefficient n-octanol / water | Not Available | |
| Odour threshold | Not Available | Auto-ignition temperature (°C) | Not Available | |
| pH (as supplied) | Not Applicable | Decomposition temperature (°C) | Not Available | |
| Melting point / freezing point (°C) | Not Available | Viscosity (cSt) | Not Available | |
| Initial boiling point and boiling range (°C) | Not Available | Molecular weight (g/mol) | Not Applicable | |
| Flash point (°C) | Not Available | Taste | Not Available | |
| Evaporation rate | Not Available | Explosive properties | Not Available | |
| Flammability | Not Available | Oxidising properties | Not Available | |
| Upper Explosive Limit (%) | Not Available | Surface Tension (dyn/cm or mN/m) | Not Available | |
| Lower Explosive Limit (%) | Not Available | Volatile Component (%vol) | Not Available | |
| Vapour pressure (kPa) | Not Available | Gas group | Not Available | |
| Solubility in water | Immiscible | pH as a solution (1%) | Not Applicable | |
| Vapour density (Air = 1) | Not Available | VOC g/L | Not Available | |

SECTION 10 Stability and reactivity

| Reactivity | See section 7 | | |
|------------------------------------|--|--|--|
| Chemical stability | Elevated temperatures. Presence of open flame. 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

Inhalation of vapours may cause drowsiness and dizziness. This may be accompanied by sleepiness, reduced alertness, loss of reflexes, lack of co-ordination, and vertigo.

Inhalation of aerosols (mists, fumes), generated by the material during the course of normal handling, may be damaging to the health of the individual.

Inhaled

There is some evidence to suggest that the material can cause respiratory irritation in some persons. The body's response to such irritation can cause further lung damage.

Inhalation of high concentrations of gas/vapour causes lung irritation with coughing and nausea, central nervous depression with headache and dizziness, slowing of reflexes, fatigue and inco-ordination.

WARNING: Intentional misuse by concentrating/inhaling contents may be lethal.

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| 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 damaging to the health of the individual. | | |
|------------------------|--|--|--|
| Skin Contact | This material can cause inflammation of the skin on contact in some persons. The material may accentuate any pre-existing dermatitis condition Skin contact with the material may damage the health of the individual; systemic effects may result following absorption. Spray mist may produce discomfort Irritation and skin reactions are possible with sensitive skin Open cuts, abraded or irritated skin should not be exposed to this material The liquid may be able to be mixed with fats or oils and may degrease the skin, producing a skin reaction described as non-allergic contact dermatitis. The material is unlikely to produce an irritant dermatitis as described in EC Directives. 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. | | |
| Еуе | Not considered to be a risk because of the extreme volatility of the gas. Limited evidence or practical experience suggests, that the material may cause eye irritation in a substantial number of individuals. Prolonged eye contact may cause inflammation characterised by a temporary redness of the conjunctiva (similar to windburn). | | |
| Chronic | Ample evidence from experiments exists that there is a suspicion this material directly reduces fertility. There has been some concern that this material can cause cancer or mutations but there is not enough data to make an assessment. Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure. There is some evidence from animal testing that exposure to this material may result in toxic effects to the unborn baby. Main route of exposure to the gas in the workplace is by inhalation. gamma-diketones are generally toxic to the nervous system. They can occur as commercial products or as metabolic products. Chronic inhalation or skin exposure to n-hexane may cause damage to nerve ends in extremities, e.g. finger, toes with loss of sensation. | | |
| Corrofiy™ Professional | | | |

| Corrofix™ Professional | TOXICITY | IRRITATION | |
|---|---|--|--|
| tainless Steel Cleaner & Protector (Aerosol) | Not Available | Not Available | |
| | TOXICITY | IRRITATION | |
| hexanes, mixture of | Dermal (rabbit) LD50: >3301.5 mg/kg ^[1] | Eye(rabbit): 10 mg - mild | |
| isomers | Inhalation(Rat) LC50: 73860 ppm4h ^[1] | | |
| | Oral (Rat) LD50: >16507.5 mg/kg ^[1] | | |
| | TOXICITY | IRRITATION | |
| 2-methylpentane | Oral (Rat) LD50: ~15.84 mg/kg ^[1] | Not Available | |
| | TOXICITY | IRRITATION | |
| white mineral oil | Dermal (rabbit) LD50: >2000 mg/kg ^[1] | Eye: no adverse effect observed (not irritating) ^[1] | |
| (petroleum) | Inhalation(Rat) LC50: >4.5 mg/l4h ^[1] | Skin: adverse effect observed (irritating) ^[1] | |
| | Oral (Rat) LD50: >5000 mg/kg ^[2] | Skin: no adverse effect observed (not irritating) ^[1] | |
| carbon dioxide | TOXICITY | IRRITATION | |
| | Not Available | Not Available | |
| Legend: | Nalue obtained from Europe ECHA Registered Substances - Acute toxicity 2. Value obtained from manufacturer's SDS. | | |
| Legena. | Unless otherwise specified data extracted from RTEC | • | |

Oral (rat) TCLo: 92000 mg/kg/92D-Cont. Generally the toxicity and irritation is of low order. White oils and highly/solvent refined oils have not shown the long term risk of skin cancer that follows persistent skin contamination with some other mineral oils, due in all probability to refining that produces low content of both polyaromatics (PAH) and benz-alpha-pyrenes (BaP) The substance is classified by IARC as Group 3:

NOT classifiable as to its carcinogenicity to humans.

Evidence of carcinogenicity may be inadequate or limited in animal testing.

WHITE MINERAL OIL (PETROLEUM)

For highly and severely refined distillate base oils:

In animal studies, the acute, oral, semilethal dose is >5g/kg body weight and the semilethal dose by skin contact is >2g/kg body weight. The semilethal concentration for inhalation is 2.18 to >4 mg/L. The materials have varied from "non-irritating" to "moderately irritating" when tested for skin and eye irritation. Testing for sensitisation has been negative. The effects of repeated exposure vary by species; in animals, effects to the testes and lung have been observed, as well as the formation of granulomas. In animals, these substances have not been found to cause reproductive toxicity or significant increases in birth defects. They are also not considered to cause cancer, mutations or chromosome aberrations.

The materials included in the Lubricating Base Oils category are related from both process and physical-chemical perspectives; The potential toxicity of a specific distillate base oil is inversely related to the severity or extent of processing the oil has

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undergone, since:

- The adverse effects of these materials are associated with undesirable components, and
- The levels of the undesirable components are inversely related to the degree of processing;
- Distillate base oils receiving the same degree or extent of processing will have similar toxicities;
- The potential toxicity of residual base oils is independent of the degree of processing the oil receives.
- The reproductive and developmental toxicity of the distillate base oils is inversely related to the degree of processing. Unrefined & mildly refined distillate base oils contain the highest levels of undesirable components, have the largest variation of hydrocarbon molecules and have shown the highest potential cancer-causing and mutation-causing activities. Highly and severely refined distillate base oils are produced from unrefined and mildly refined oils by removing or transforming undesirable components. In comparison to unrefined and mildly refined base oils, the highly and severely refined distillate base oils have a smaller range of hydrocarbon molecules and have demonstrated very low mammalian toxicity. Testing of residual oils for mutation-causing and cancer-causing potential has shown negative results, supporting the belief that these materials lack biologically active components or the components are largely non-bioavailable due to their molecular size.

 Toxicity testing has consistently shown that lubricating base oils have low acute toxicities. Numerous tests have shown that a lubricating base oil s mutagenic and carcinogenic potential correlates with its 3-7 ring polycyclic aromatic compound (PAC)

Toxicity testing has consistently shown that lubricating base oils have low acute toxicities. Numerous tests have shown that a lubricating base oil s mutagenic and carcinogenic potential correlates with its 3-7 ring polycyclic aromatic compound (PAC) content, and the level of DMSO extractables (e.g. IP346 assay), both characteristics that are directly related to the degree/conditions of processing.

HEXANES, MIXTURE OF ISOMERS & 2-METHYLPENTANE

No significant acute toxicological data identified in literature search.

| 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: X − Data either not available or does not fill the criteria for classification

✓ – Data available to make classification

SECTION 12 Ecological information

Toxicity

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| Corrofix™ Professional | Endpoint | Test Duration (hr) | Species | Value | Source |
|--|------------------|-----------------------------------|--|------------------|------------------|
| Stainless Steel Cleaner & Protector (Aerosol) | Not Available | Not Available | Not Available | Not Available | Not Available |
| hexanes, mixture of isomers | Endpoint | Test Duration (hr) | Species | Value | Source |
| | Not Available | Not Available | Not Available | Not Available | Not Available |
| | Endpoint | Test Duration (hr) | Species | Value | Source |
| 2-methylpentane | EC50(ECx) | 96h | Algae or other aquatic plants | 4.321mg/l | 2 |
| | EC50 | 96h | Algae or other aquatic plants | 4.321mg/l | 2 |
| white mineral oil | Endpoint | Test Duration (hr) | Species | Value | Sourc |
| (petroleum) | LC50 | 96h | Fish | >10000mg/L | 2 |
| carbon dioxide | Endpoint | Test Duration (hr) | Species | Value | Sourc |
| | LC50 | 96h | Fish | 35mg/l | 1 |
| Legend: | 4. US EPA, Ed | cotox database - Aquatic Toxicity | pe ECHA Registered Substances - Ecotoxicolo Data 5. ECETOC Aquatic Hazard Assessment ncentration Data 8. Vendor Data | • | |

Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

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.

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| Ingredient | Persistence: Water/Soil | Persistence: Air |
|-----------------|-------------------------|------------------|
| 2-methylpentane | LOW | LOW |
| carbon dioxide | LOW | LOW |

Bioaccumulative potential

| Ingredient | Bioaccumulation | |
|-----------------|-----------------------|--|
| 2-methylpentane | LOW (LogKOW = 3.2145) | |
| carbon dioxide | LOW (LogKOW = 0.83) | |

Mobility in soil

| Ingredient | Mobility |
|-----------------|--------------------|
| 2-methylpentane | LOW (KOC = 124.9) |
| carbon dioxide | HIGH (KOC = 1.498) |

SECTION 13 Disposal considerations

Waste treatment methods

Product / Packaging disposal

- ▶ 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.
- Consult State Land Waste Management Authority for disposal.
- ▶ Discharge contents of damaged aerosol cans at an approved site.
- Allow small quantities to evaporate.
- ► DO NOT incinerate or puncture aerosol cans.
- Bury residues and emptied aerosol cans at an approved site.

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



HAZCHEM

Not Applicable

Land transport (ADG)

| UN number or ID number | 1950 |
|-------------------------|----------|
| UN proper shipping name | AEROSOLS |

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| Transport hazard class(es) | | 2.1 Not Applicable | |
|------------------------------|-------------------------------------|----------------------------------|--|
| Packing group | Not Applicable | | |
| Environmental hazard | Environmentally hazardous | | |
| Special precautions for user | Special provisions Limited quantity | 63 190 277 327 344 381 1000ml | |

Land transport (UN)

| UN number or ID number | 1950 | | |
|------------------------------|--|--|--|
| UN proper shipping name | AEROSOLS | | |
| Transport hazard class(es) | | | |
| Packing group | Not Applicable | | |
| Environmental hazard | Environmentally hazardous | | |
| Special precautions for user | Special provisions 63; 190; 277; 327; 344; 381 Limited quantity 1000ml | | |

Air transport (ICAO-IATA / DGR)

| UN number | 1950 | | |
|------------------------------|--|---------------------------------|--|
| UN proper shipping name | Aerosols, flammable | | |
| Transport hazard class(es) | ICAO/IATA Class ICAO / IATA Subrisk ERG Code | 2.1 Not Applicable 10L | |
| Packing group | Not Applicable | | |
| Environmental hazard | Environmentally hazardous | | |
| Special precautions for user | | Qty / Pack Packing Instructions | A145 A167 A802 203 150 kg 203 75 kg Y203 30 kg G |

Sea transport (IMDG-Code / GGVSee)

| UN number | 1950 | |
|------------------------------|--|---|
| UN proper shipping name | AEROSOLS | |
| Transport hazard class(es) | IMDG Class 2.1 IMDG Subrisk Not Applicable | |
| Packing group | Not Applicable | |
| Environmental hazard | Marine Pollutant | |
| Special precautions for user | EMS Number Special provisions Limited Quantities | F-D, S-U 63 190 277 327 344 381 959 1000 ml |

Transport in bulk according to Annex II of MARPOL and the IBC code

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Transport in bulk in accordance with MARPOL Annex V and the IMSBC Code

| Product name | Group |
|-------------------------------|---------------|
| hexanes, mixture of isomers | Not Available |
| 2-methylpentane | Not Available |
| white mineral oil (petroleum) | Not Available |
| carbon dioxide | Not Available |

Transport in bulk in accordance with the IGC Code

| Product name | Ship Type |
|-------------------------------|---------------|
| hexanes, mixture of isomers | Not Available |
| 2-methylpentane | Not Available |
| white mineral oil (petroleum) | Not Available |
| carbon dioxide | Not Available |

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 | |
|------------|--|--|
| HSR002515 | Aerosols 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.

hexanes, mixture of isomers is found on the following regulatory lists

Australian Inventory of Industrial Chemicals (AIIC)

New Zealand Inventory of Chemicals (NZIoC)

2-methylpentane is found on the following regulatory lists

Australian Inventory of Industrial Chemicals (AIIC)

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)

white mineral oil (petroleum) is found on the following regulatory lists

Australian Inventory of Industrial Chemicals (AIIC)

Chemical Footprint Project - Chemicals of High Concern List

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs - Group 1: Carcinogenic to humans

International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs - Not Classified as Carcinogenic

New Zealand Approved Hazardous Substances with controls

New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals

New Zealand Inventory of Chemicals (NZIoC)

New Zealand Workplace Exposure Standards (WES)

carbon dioxide is found on the following regulatory lists

Australian Inventory of Industrial Chemicals (AIIC)

FEI Equine Prohibited Substances List - Controlled Medication

FEI Equine Prohibited Substances List (EPSL)

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)

Hazardous Substance Location

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

| Hazard Class | Quantity (Closed Containers) | Quantity (Open Containers) |
|--------------|------------------------------------|------------------------------------|
| 2.1.2A | 3 000 L (aggregate water capacity) | 3 000 L (aggregate water capacity) |

Certified Handler

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

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| 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 |
|--------------|--------------------------------------|---------------|---------------|--|
| 2.1.2A | | | | 1L (aggregate water capacity) |

Tracking Requirements

Not Applicable

National Inventory Status

| National Inventory | Status | |
|--|--|--|
| Australia - AIIC / Australia Non-Industrial Use | Yes | |
| Canada - DSL | No (hexanes, mixture of isomers) | |
| Canada - NDSL | No (hexanes, mixture of isomers; 2-methylpentane; white mineral oil (petroleum); carbon dioxide) | |
| China - IECSC | No (hexanes, mixture of isomers) | |
| Europe - EINEC / ELINCS / NLP | Yes | |
| Japan - ENCS | Yes | |
| Korea - KECI | No (hexanes, mixture of isomers) | |
| New Zealand - NZIoC | Yes | |
| Philippines - PICCS | No (hexanes, mixture of isomers) | |
| USA - TSCA | No (hexanes, mixture of isomers) | |
| Taiwan - TCSI | Yes | |
| Mexico - INSQ | No (hexanes, mixture of isomers) | |
| Vietnam - NCI | Yes | |
| Russia - FBEPH | No (hexanes, mixture of isomers) | |
| 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 | 19/04/2023 |
|---------------|------------|
| Initial Date | 19/04/2023 |

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.