



# CRC(NZ) Brakleen Non Chlorinated 5084

## CRC Industries (CRC Industries New Zealand)

Chemwatch: 62-6415

Version No: 8.1

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

Chemwatch Hazard Alert Code: 3

Initial Date: 19/04/2016

Revision Date: 10/04/2025

Print Date: 21/07/2026

S.GHS.NZL.EN

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

#### Product Identifier

|                               |                                       |
|-------------------------------|---------------------------------------|
| Product name                  | CRC(NZ) Brakleen Non Chlorinated 5084 |
| Chemical Name                 | Not Applicable                        |
| Synonyms                      | Not Available                         |
| 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 | Solvent degreaser for removing brake dust and general industrial soils.<br>Application is by spray atomisation from a hand held aerosol pack<br>Use according to manufacturer's directions. |
|--------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

#### 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#: 62-6415)      |
| Other emergency telephone number(s) | 111 (NZ Emergency Services)                  | +61 3 9573 3188                     |

### SECTION 2 Hazards identification

#### Classification of the substance or mixture

|                                                 |                                                                                                                                                                                                            |
|-------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Classification <sup>[1]</sup>                   | Aerosols, Hazard Category 1, Serious Eye Damage/Eye Irritation Category 2, Specific Target Organ Toxicity - Repeated Exposure Category 2, Hazardous to the Aquatic Environment Long-Term Hazard Category 1 |
| 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, 6.4A, 6.9B, 9.1A                                                                                                                                                                                   |

#### Label elements

|                     |                                                                                                                                                                                                                                                                                                                                     |
|---------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Hazard pictogram(s) |     |
| Signal word         | <b>Danger</b>                                                                                                                                                                                                                                                                                                                       |

#### Hazard statement(s)

|                  |                                                                          |
|------------------|--------------------------------------------------------------------------|
| <b>H222+H229</b> | Extremely flammable aerosol. Pressurized container: may burst if heated. |
| <b>H319</b>      | Causes serious eye irritation.                                           |
| <b>H373</b>      | May cause damage to organs through prolonged or repeated exposure.       |
| <b>H410</b>      | Very 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>P211</b> | Do not spray on an open flame or other ignition source.                                        |
| <b>P251</b> | Do not pierce or burn, even after use.                                                         |
| <b>P260</b> | Do not breathe mist/vapours/spray.                                                             |

#### Precautionary statement(s) Response

|                       |                                                                                                                                  |
|-----------------------|----------------------------------------------------------------------------------------------------------------------------------|
| <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.                                                                        |
| <b>P391</b>           | Collect spillage.                                                                                                                |

#### Precautionary statement(s) Storage

|                  |                                                                              |
|------------------|------------------------------------------------------------------------------|
| <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. |
|-------------|----------------------------------------------------------------------------------------------------------------------------------|

No further product hazard information.

## SECTION 3 Composition / information on ingredients

### Substances

See section below for composition of Mixtures

### Mixtures

| CAS No      | %[weight] | Name                                              |
|-------------|-----------|---------------------------------------------------|
| 64742-89-8. | 20-60     | <u>naphtha petroleum, light aliphatic solvent</u> |
| 142-82-5    | 20-60     | <u>heptane</u>                                    |
| 110-54-3    | 1-10      | <u>n-hexane</u>                                   |
| 67-64-1     | 5-15      | <u>acetone</u>                                    |
| 67-63-0     | 5-15      | <u>isopropanol</u>                                |
| 124-38-9    | 1-5       | <u>carbon dioxide</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> | <p>If aerosols come in contact with the eyes:</p> <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> |
|--------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
|---------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                     | <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>    | <ul style="list-style-type: none"> <li>▸ Avoid giving milk or oils.</li> <li>▸ Avoid giving alcohol.</li> </ul> <p>Not considered a normal route of entry.</p> <ul style="list-style-type: none"> <li>▸ If spontaneous vomiting appears imminent or occurs, hold patient's head down, lower than their hips to help avoid possible aspiration of vomitus.</li> </ul>                                                                                                                                                                                                                                            |

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

Treat symptomatically.

To treat poisoning by the higher aliphatic alcohols (up to C7):

- Gastric lavage with copious amounts of water.
- It may be beneficial to instill 60 ml of mineral oil into the stomach.
- Oxygen and artificial respiration as needed.
- Electrolyte balance: it may be useful to start 500 ml. M/6 sodium bicarbonate intravenously but maintain a cautious and conservative attitude toward electrolyte replacement unless shock or severe acidosis threatens.
- To protect the liver, maintain carbohydrate intake by intravenous infusions of glucose.
- Haemodialysis if coma is deep and persistent. [GOSSELIN, SMITH HODGE: Clinical Toxicology of Commercial Products, Ed 5]

#### BASIC TREATMENT

- Establish a patent airway with suction where necessary.
- Watch for signs of respiratory insufficiency and assist ventilation as necessary.
- Administer oxygen by non-rebreather mask at 10 to 15 l/min.
- Monitor and treat, where necessary, for shock.
- Monitor and treat, where necessary, for pulmonary oedema.
- Anticipate and treat, where necessary, for seizures.
- **DO NOT use emetics.** Where ingestion is suspected rinse mouth and give up to 200 ml water (5 ml/kg recommended) for dilution where patient is able to swallow, has a strong gag reflex and does not drool.
- Give activated charcoal.

#### ADVANCED TREATMENT

- Consider orotracheal or nasotracheal intubation for airway control in unconscious patient or where respiratory arrest has occurred.
- Positive-pressure ventilation using a bag-valve mask might be of use.
- Monitor and treat, where necessary, for arrhythmias.
- Start an IV D5W TKO. If signs of hypovolaemia are present use lactated Ringers solution. Fluid overload might create complications.
- If the patient is hypoglycaemic (decreased or loss of consciousness, tachycardia, pallor, dilated pupils, diaphoresis and/or dextrose strip or glucometer readings below 50 mg), give 50% dextrose.
- Hypotension with signs of hypovolaemia requires the cautious administration of fluids. Fluid overload might create complications.
- Drug therapy should be considered for pulmonary oedema.
- Treat seizures with diazepam.
- Proparacaine hydrochloride should be used to assist eye irrigation.

#### EMERGENCY DEPARTMENT

- Laboratory analysis of complete blood count, serum electrolytes, BUN, creatinine, glucose, urinalysis, baseline for serum aminotransferases (ALT and AST), calcium, phosphorus and magnesium, may assist in establishing a treatment regime. Other useful analyses include anion and osmolar gaps, arterial blood gases (ABGs), chest radiographs and electrocardiograph.
- Positive end-expiratory pressure (PEEP)-assisted ventilation may be required for acute parenchymal injury or adult respiratory distress syndrome.
- Acidosis may respond to hyperventilation and bicarbonate therapy.
- Haemodialysis might be considered in patients with severe intoxication.
- Consult a toxicologist as necessary. BRONSTEIN, A.C. and CURRANCE, P.L. EMERGENCY CARE FOR HAZARDOUS MATERIALS EXPOSURE: 2nd Ed. 1994

For C8 alcohols and above.

Symptomatic and supportive therapy is advised in managing patients.

## 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 | <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> |
|----------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

Advice for firefighters

|                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |
|-----------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Fire Fighting         | <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>                                                                                                                                                                                                                                                                                                                                |
| Fire/Explosion Hazard | <ul style="list-style-type: none"><li>▸ Liquid and vapour are highly flammable.</li><li>▸ Severe fire hazard when exposed to heat or flame.</li><li>▸ Vapour forms an explosive mixture with air.</li><li>▸ Severe explosion hazard, in the form of vapour, when exposed to flame or spark.</li></ul> <p>Combustion products include:</p> <ul style="list-style-type: none"><li>▸ carbon dioxide (CO2)</li><li>▸ other pyrolysis products typical of burning organic material.</li></ul> <p><b>Contains low boiling substance:</b> Closed containers may rupture due to pressure buildup under fire conditions.</p> <p>May emit clouds of acrid smoke</p> |

SECTION 6 Accidental release measures

Personal precautions, protective equipment and emergency procedures

See section 8

Environmental precautions

See section 12

Methods and material for containment and cleaning up

|              |                                                                                                                                                                                                                                                                                                              |
|--------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Minor Spills | <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> |
| Major Spills | <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

|                   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   |
|-------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Safe handling     | <p>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.</p> <ul style="list-style-type: none"><li>▸ <b>DO NOT allow clothing wet with material to stay in contact with skin</b></li><li>▸ Avoid skin contact, including inhalation.</li><li>▸ Wear protective clothing when risk of exposure occurs.</li><li>▸ Use in a well-ventilated area.</li><li>▸ Prevent concentration in hollows and sumps.</li></ul> |
| Other information | <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><li>▸ Store in original containers in approved flammable liquid storage area.</li><li>▸ <b>DO NOT store in pits, depressions, basements or areas where vapours may be trapped.</b></li><li>▸ No smoking, naked lights, heat or ignition sources.</li><li>▸ Keep containers securely sealed.</li></ul>                                                                                                                                                                                                                                                                                                                                                              |

Conditions for safe storage, including any incompatibilities

|                    |                                                                                                                            |
|--------------------|----------------------------------------------------------------------------------------------------------------------------|
| Suitable container | <ul style="list-style-type: none"><li>▸ Aerosol dispenser.</li><li>▸ Check that containers are clearly labelled.</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) | naphtha petroleum, light aliphatic solvent | Oil mist, mineral   | 5 mg/m <sup>3</sup>               | 10 mg/m <sup>3</sup>                | Not Available | om - Sampled by a method that does not collect vapour                        |
| New Zealand Workplace Exposure Standards (WES) | heptane                                    | Heptane (n-Heptane) | 400 ppm / 1640 mg/m <sup>3</sup>  | 2050 mg/m <sup>3</sup> / 500 ppm    | Not Available | oto - Ototoxin                                                               |
| New Zealand Workplace Exposure Standards (WES) | n-hexane                                   | Hexane (n-Hexane)   | 20 ppm / 72 mg/m <sup>3</sup>     | Not Available                       | Not Available | bio - Exposure can also be estimated by biological monitoring oto - Ototoxin |
| New Zealand Workplace Exposure Standards (WES) | acetone                                    | Acetone             | 500 ppm / 1185 mg/m <sup>3</sup>  | 2375 mg/m <sup>3</sup> / 1000 ppm   | Not Available | bio - Exposure can also be estimated by biological monitoring                |
| New Zealand Workplace Exposure Standards (WES) | isopropanol                                | Isopropyl alcohol   | 200 ppm / 491 mg/m <sup>3</sup>   | 983 mg/m <sup>3</sup> / 400 ppm     | Not Available | Not Available                                                                |
| New Zealand Workplace Exposure Standards (WES) | carbon dioxide                             | Carbon dioxide      | 5000 ppm / 9000 mg/m <sup>3</sup> | 54000 mg/m <sup>3</sup> / 30000 ppm | Not Available | Not Available                                                                |

### Exposure controls

|                                                                       |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |
|-----------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Appropriate engineering controls                                      | <p><b>CARE:</b> Use of a quantity of this material in confined space or poorly ventilated area, where rapid build up of concentrated atmosphere may occur, could require increased ventilation and/or protective gear</p> <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>                                                                                                                                                                                                                                                                                           |
| Individual protection measures, such as personal protective equipment |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               |
| Eye and face protection                                               | <ul style="list-style-type: none"> <li>► Safety glasses with side shields.</li> <li>► Chemical goggles.[AS/NZS 1337.1, EN166 or national equivalent]</li> <li>► 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.</li> <li>► Close fitting gas tight goggles</li> </ul> <p><b>DO NOT wear contact lenses.</b></p> <ul style="list-style-type: none"> <li>► Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lens 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.</li> </ul> |
| Skin protection                                                       | See Hand protection below                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| Hands/feet protection                                                 | <ul style="list-style-type: none"> <li>► Neoprene rubber gloves</li> <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>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |
| Body protection                                                       | See Other protection below                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
| Other protection                                                      | <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> <li>► 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 including cotton.</li> </ul>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |

- Avoid dangerous levels of charge by ensuring a low resistivity of the surface material worn outermost.  
BREThERICK: Handbook of Reactive Chemical Hazards.

## 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:

CRC(NZ) Brakleen Non Chlorinated 5084

| Material          | CPI |
|-------------------|-----|
| BUTYL             | C   |
| BUTYL/NEOPRENE    | C   |
| CPE               | C   |
| HYPALON           | C   |
| NAT+NEOPR+NITRILE | C   |
| NATURAL RUBBER    | C   |
| NATURAL+NEOPRENE  | C   |
| NEOPRENE          | C   |
| NEOPRENE/NATURAL  | C   |
| NITRILE           | C   |
| NITRILE+PVC       | C   |
| PE/EVAL/PE        | C   |
| PVA               | C   |
| PVC               | C   |
| PVDC/PE/PVDC      | C   |
| SARANEX-23        | C   |
| SARANEX-23 2-PLY  | C   |
| TEFLON            | C   |
| VITON             | C   |
| VITON/CHLOROBUTYL | C   |
| VITON/NEOPRENE    | C   |

\* CPI - Chemwatch Performance Index

A: Best Selection

B: Satisfactory; may degrade after 4 hours continuous immersion

C: Poor to Dangerous Choice for other than short term immersion

**NOTE:** As a series of factors will influence the actual performance of the glove, a final selection must be based on detailed observation. -

\* Where the glove is to be used on a short term, casual or infrequent basis, factors such as "feel" or convenience (e.g. disposability), may dictate a choice of gloves which might otherwise be unsuitable following long-term or frequent use. A qualified practitioner should be consulted.

## Respiratory protection

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

- Cartridge respirators should never be used for emergency ingress or in areas of unknown vapour concentrations or oxygen content.
- The wearer must be warned to leave the contaminated area immediately on detecting any odours through the respirator. The odour may indicate that the mask is not functioning properly, that the vapour concentration is too high, or that the mask is not properly fitted. Because of these limitations, only restricted use of cartridge respirators is considered appropriate.
- Cartridge performance is affected by humidity. Cartridges should be changed after 2 hr of continuous use unless it is determined that the humidity is less than 75%, in which case, cartridges can be used for 4 hr. Used cartridges should be discarded daily, regardless of the length of time used
- Positive pressure, full face, air-supplied breathing apparatus should be used for work in enclosed spaces if a leak is suspected or the primary containment is to be opened (e.g. for a cylinder change)
- Air-supplied breathing apparatus is required where release of gas from primary containment is either suspected or demonstrated.

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                                   | Clear colourless flammable liquid with an ethereal odour; not miscible with water. |                                         |                |
|----------------------------------------------|------------------------------------------------------------------------------------|-----------------------------------------|----------------|
| Physical state                               | Liquid                                                                             | Relative density (Water = 1)            | 0.70-0.75      |
| Odour                                        | Not Available                                                                      | 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) | >95                                                                                | Molecular weight (g/mol)                | Not Applicable |

|                                                       |                   |                                                            |                |
|-------------------------------------------------------|-------------------|------------------------------------------------------------|----------------|
| <b>Flash point (°C)</b>                               | -4                | <b>Taste</b>                                               | Not Available  |
| <b>Evaporation rate</b>                               | Not Available     | <b>Explosive properties</b>                                | Not Available  |
| <b>Flammability</b>                                   | HIGHLY FLAMMABLE. | <b>Oxidising properties</b>                                | Not Available  |
| <b>Upper Explosive Limit (%)</b>                      | Not Available     | <b>Surface Tension (dyn/cm or mN/m)</b>                    | Not Available  |
| <b>Lower Explosive Limit (%)</b>                      | Not Available     | <b>Volatile Component (%vol)</b>                           | Not Available  |
| <b>Vapour pressure (kPa)</b>                          | Not Available     | <b>Gas group</b>                                           | Not Available  |
| <b>Solubility in water</b>                            | Immiscible        | <b>pH as a solution (1%)</b>                               | Not Applicable |
| <b>Vapour density (Air = 1)</b>                       | >1                | <b>VOC g/L</b>                                             | Not Available  |
| <b>Heat of Combustion (kJ/g)</b>                      | Not Available     | <b>Ignition Distance (cm)</b>                              | Not Available  |
| <b>Flame Height (cm)</b>                              | Not Available     | <b>Flame Duration (s)</b>                                  | Not Available  |
| <b>Enclosed Space Ignition Time Equivalent (s/m3)</b> | Not Available     | <b>Enclosed Space Ignition Deflagration Density (g/m3)</b> | Not Available  |

## SECTION 10 Stability and reactivity

|                                           |                                                                                                                                                                                                            |
|-------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <b>Reactivity</b>                         | See section 7                                                                                                                                                                                              |
| <b>Chemical stability</b>                 | <ul style="list-style-type: none"> <li>▸ Elevated temperatures.</li> <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>                    | Based on available data, the classification criteria are not met.                                            |
| <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>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.</p> <p>Inhalation of aerosols (mists, fumes), generated by the material during the course of normal handling, may be damaging to the health of the individual.</p> <p>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.</p> <p>Inhalation hazard is increased at higher temperatures.</p> <p>Inhaling high concentrations of mixed hydrocarbons can cause narcosis, with nausea, vomiting and lightheadedness. Low molecular weight (C2-C12) hydrocarbons can irritate mucous membranes and cause incoordination, giddiness, nausea, vertigo, confusion, headache, appetite loss, drowsiness, tremors and stupor.</p> <p>Central nervous system (CNS) depression may include general discomfort, symptoms of giddiness, headache, dizziness, nausea, anaesthetic effects, slowed reaction time, slurred speech and may progress to unconsciousness. Serious poisonings may result in respiratory depression and may be fatal.</p> <p>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.</p> <p>Material is highly volatile and may quickly form a concentrated atmosphere in confined or unventilated areas. The vapour may displace and replace air in breathing zone, acting as a simple asphyxiant. This may happen with little warning of overexposure. Symptoms of asphyxia (suffocation) may include headache, dizziness, shortness of breath, muscular weakness, drowsiness and ringing in the ears. If the asphyxia is allowed to progress, there may be nausea and vomiting, further physical weakness and</p> |
|----------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

|                     |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |
|---------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
|                     | unconsciousness and, finally, convulsions, coma and death.<br><b>WARNING:</b> Intentional misuse by concentrating/inhaling contents may be lethal.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Ingestion</b>    | Accidental ingestion of the material may be damaging to the health of the individual.<br>Not normally a hazard due to physical form of product.<br>Considered an unlikely route of entry in commercial/industrial environments<br>Considered an unlikely route of entry in commercial/industrial environments. The liquid may produce gastrointestinal discomfort and may be harmful if swallowed.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    |
| <b>Skin Contact</b> | This material can cause inflammation of the skin on contact in some persons.<br>The material may accentuate any pre-existing dermatitis condition<br>Repeated exposure may cause skin cracking, flaking or drying following normal handling and use.<br>Skin contact with the material may damage the health of the individual; systemic effects may result following absorption.<br>Spray mist may produce discomfort<br>Open cuts, abraded or irritated skin should not be exposed to this material                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 |
| <b>Eye</b>          | This material causes serious eye irritation.<br>Not considered to be a risk because of the extreme volatility of the gas.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             |
| <b>Chronic</b>      | Harmful: danger of serious damage to health by prolonged exposure through inhalation.<br>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.<br>Ample evidence from experiments exists that there is a suspicion this material directly reduces fertility.<br>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.<br>There has been some concern that this material can cause cancer or mutations but there is not enough data to make an assessment.<br>Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure.<br>Chronic solvent inhalation exposures may result in nervous system impairment and liver and blood changes. [PATTYS] |

|                                                   |                                                     |                                                                  |
|---------------------------------------------------|-----------------------------------------------------|------------------------------------------------------------------|
| <b>CRC(NZ) Brakleen Non Chlorinated 5084</b>      | <b>TOXICITY</b>                                     | <b>IRRITATION</b>                                                |
|                                                   | Not Available                                       | Not Available                                                    |
| <b>naphtha petroleum, light aliphatic solvent</b> | <b>TOXICITY</b>                                     | <b>IRRITATION</b>                                                |
|                                                   | Dermal (rabbit) LD50: >1900 mg/kg <sup>[1]</sup>    | Eye: no adverse effect observed (not irritating) <sup>[1]</sup>  |
|                                                   | Inhalation (Rat) LC50: >4.42 mg/L4h <sup>[1]</sup>  | Skin: adverse effect observed (irritating) <sup>[1]</sup>        |
|                                                   | Oral (Rat) LD50: >4500 mg/kg <sup>[1]</sup>         |                                                                  |
| <b>heptane</b>                                    | <b>TOXICITY</b>                                     | <b>IRRITATION</b>                                                |
|                                                   | Dermal (rabbit) LD50: >2000 mg/kg <sup>[1]</sup>    | Eye: no adverse effect observed (not irritating) <sup>[1]</sup>  |
|                                                   | Inhalation (Rat) LC50: >29.29 mg/L4h <sup>[1]</sup> | Skin: adverse effect observed (irritating) <sup>[1]</sup>        |
|                                                   | Oral (Rat) LD50: >5000 mg/kg <sup>[1]</sup>         | Skin: no adverse effect observed (not irritating) <sup>[1]</sup> |
| <b>n-hexane</b>                                   | <b>TOXICITY</b>                                     | <b>IRRITATION</b>                                                |
|                                                   | Dermal (rabbit) LD50: >2000 mg/kg <sup>[1]</sup>    | Eye (Rodent - rabbit): 10mg - Mild                               |
|                                                   | Inhalation (Rat) LC50: 48000 ppm4h <sup>[2]</sup>   | Eye: no adverse effect observed (not irritating) <sup>[1]</sup>  |
|                                                   | Oral (Rat) LD50: 28710 mg/kg <sup>[2]</sup>         | Skin: no adverse effect observed (not irritating) <sup>[1]</sup> |
| <b>acetone</b>                                    | <b>TOXICITY</b>                                     | <b>IRRITATION</b>                                                |
|                                                   | Dermal (rabbit) LD50: 20000 mg/kg <sup>[2]</sup>    | Eye (Human): 186300ppm - Mild                                    |
|                                                   | Inhalation (Mouse) LC50: 44 mg/L4h <sup>[2]</sup>   | Eye (Human): 500ppm                                              |
|                                                   | Oral (Rat) LD50: 5800 mg/kg <sup>[2]</sup>          | Eye (Rodent - rabbit): 10uL - Mild                               |
|                                                   |                                                     | Eye (Rodent - rabbit): 20mg - Severe                             |
|                                                   |                                                     | Eye (Rodent - rabbit): 20mg/24H - Moderate                       |
|                                                   |                                                     | Eye: adverse effect observed (irritating) <sup>[1]</sup>         |
|                                                   |                                                     | Skin (Rodent - rabbit): 395mg - Mild                             |
|                                                   |                                                     | Skin (Rodent - rabbit): 500mg/24H - Mild                         |
|                                                   |                                                     | Skin: no adverse effect observed (not irritating) <sup>[1]</sup> |

| isopropanol    | TOXICITY                                          | IRRITATION                                               |
|----------------|---------------------------------------------------|----------------------------------------------------------|
|                | Dermal (rabbit) LD50: 12800 mg/kg <sup>[2]</sup>  | Eye (Rodent - rabbit): 100mg - Severe                    |
|                | Inhalation (Mouse) LC50: 53 mg/L4h <sup>[2]</sup> | Eye (Rodent - rabbit): 100mg/24H - Moderate              |
|                | Oral (Mouse) LD50; 3600 mg/kg <sup>[2]</sup>      | Eye (Rodent - rabbit): 10mg - Moderate                   |
|                |                                                   | Eye: adverse effect observed (irritating) <sup>[1]</sup> |
|                |                                                   | Skin (Rodent - rabbit): 500mg - Mild                     |
| carbon dioxide | TOXICITY                                          | IRRITATION                                               |
|                | Not Available                                     | 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>CRC(NZ) Brakleen Non Chlorinated 5084</b>                                                  | <p>Animal studies indicate that normal, branched and cyclic paraffins are absorbed from the gastrointestinal tract and that the absorption of n-paraffins is inversely proportional to the carbon chain length, with little absorption above C30. With respect to the carbon chain lengths likely to be present in mineral oil, n-paraffins may be absorbed to a greater extent than iso- or cyclo-paraffins.</p> <p>The major classes of hydrocarbons are well absorbed into the gastrointestinal tract in various species. In many cases, the hydrophobic hydrocarbons are ingested in association with fats in the diet. Some hydrocarbons may appear unchanged as in the lipoprotein particles in the gut lymph, but most hydrocarbons partly separate from fats and undergo metabolism in the gut cell.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                        |
| <b>N-HEXANE</b>                                                                               | The material may be irritating to the eye, with prolonged contact causing inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>ACETONE</b>                                                                                | <p>For acetone:</p> <p>The acute toxicity of acetone is low. Acetone is not a skin irritant or sensitizer, but it removes fat from the skin, and it also irritates the eye. Animal testing shows acetone may cause anaemia. Studies in humans have shown that exposure to acetone at a level of 2375 mg/m3 does not negatively impact an individual's emotional regulation, behaviour, or learning ability.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         |
| <b>ISOPROPANOL</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>Isopropanol is irritating to the eyes, nose and throat but generally not to the skin. Prolonged high dose exposure may also produce depression of the central nervous system and drowsiness. Few have reported skin irritation. It can be absorbed from the skin or when inhaled.</p> <p>The substance is classified by IARC as Group 3:<br/> <b>NOT</b> classifiable as to its carcinogenicity to humans.<br/> Evidence of carcinogenicity may be inadequate or limited in animal testing.</p> |
| <b>CRC(NZ) Brakleen Non Chlorinated 5084 &amp; NAPHTHA PETROLEUM, LIGHT ALIPHATIC SOLVENT</b> | <p>Petroleum contains aromatic (benzene, toluene, ethyl benzene, naphthalene) and aliphatic hydrocarbons (n-hexane), which can result in many detrimental health effects, including, cancer, tumour formation, hearing loss, and nervous system toxicity. Animal testing shows breathing in petroleum causes tumours of the liver and kidney; these are however not considered to be relevant in humans. Similarly, exposure to gasoline over a lifetime can cause kidney cancer in animals, but the relevance in humans is questionable.</p> <p>Most studies involving gasoline have shown that gasoline does not cause genetic mutation, including all recent studies in living human subjects (such as in petrol service station attendants).</p> <p>Animal studies show concentrations of toluene (&gt;0.1%) can cause developmental effects such as lower birth weight and developmental toxicity to the nervous system of the foetus. Other studies show no adverse effects on the foetus.</p> <p>Prolonged contact with petroleum may result in skin inflammation and make the skin more sensitive to irritation and penetration by other materials.</p>                                                                                                                         |
| <b>ACETONE &amp; ISOPROPANOL</b>                                                              | The material may cause skin irritation after prolonged or repeated exposure and may produce on contact skin redness, swelling, the production of vesicles, scaling and thickening of the skin.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                          |

|                                          |   |                                 |   |
|------------------------------------------|---|---------------------------------|---|
| <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

|                                            |                                                                                                                                                                                                                                                                                                                          |                    |                               |                   |               |
|--------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------|-------------------------------|-------------------|---------------|
| CRC(NZ) Brakleen Non Chlorinated 5084      | Endpoint                                                                                                                                                                                                                                                                                                                 | Test Duration (hr) | Species                       | Value             | Source        |
|                                            | Not Available                                                                                                                                                                                                                                                                                                            | Not Available      | Not Available                 | Not Available     | Not Available |
| naphtha petroleum, light aliphatic solvent | Endpoint                                                                                                                                                                                                                                                                                                                 | Test Duration (hr) | Species                       | Value             | Source        |
|                                            | EC50                                                                                                                                                                                                                                                                                                                     | 72h                | Algae or other aquatic plants | 6.5mg/l           | 1             |
|                                            | EC50                                                                                                                                                                                                                                                                                                                     | 96h                | Algae or other aquatic plants | 64mg/l            | 2             |
|                                            | NOEC(ECx)                                                                                                                                                                                                                                                                                                                | 72h                | Algae or other aquatic plants | <0.1mg/l          | 1             |
|                                            | LC50                                                                                                                                                                                                                                                                                                                     | 96h                | Fish                          | >100000mg/L       | 4             |
| heptane                                    | Endpoint                                                                                                                                                                                                                                                                                                                 | Test Duration (hr) | Species                       | Value             | Source        |
|                                            | EC50                                                                                                                                                                                                                                                                                                                     | 48h                | Crustacea                     | 0.4mg/l           | 2             |
|                                            | NOEC(ECx)                                                                                                                                                                                                                                                                                                                | 504h               | Crustacea                     | 0.17mg/l          | 2             |
|                                            | LC50                                                                                                                                                                                                                                                                                                                     | 96h                | Fish                          | 0.11mg/l          | 2             |
| n-hexane                                   | Endpoint                                                                                                                                                                                                                                                                                                                 | Test Duration (hr) | Species                       | Value             | Source        |
|                                            | EC50(ECx)                                                                                                                                                                                                                                                                                                                | 4h                 | Algae or other aquatic plants | 0.12mg/L          | 4             |
|                                            | LC50                                                                                                                                                                                                                                                                                                                     | 96h                | Fish                          | 113mg/L           | 4             |
| acetone                                    | Endpoint                                                                                                                                                                                                                                                                                                                 | Test Duration (hr) | Species                       | Value             | Source        |
|                                            | EC50                                                                                                                                                                                                                                                                                                                     | 72h                | Algae or other aquatic plants | 5600-10000mg/L    | 4             |
|                                            | EC50                                                                                                                                                                                                                                                                                                                     | 48h                | Crustacea                     | 6098.4mg/L        | 5             |
|                                            | EC50                                                                                                                                                                                                                                                                                                                     | 96h                | Algae or other aquatic plants | 9.873-27.684mg/l  | 4             |
|                                            | NOEC(ECx)                                                                                                                                                                                                                                                                                                                | 12h                | Fish                          | 0.001mg/L         | 4             |
|                                            | LC50                                                                                                                                                                                                                                                                                                                     | 96h                | Fish                          | 3744.6-5000.7mg/L | 4             |
| isopropanol                                | Endpoint                                                                                                                                                                                                                                                                                                                 | Test Duration (hr) | Species                       | Value             | Source        |
|                                            | EC50                                                                                                                                                                                                                                                                                                                     | 72h                | Algae or other aquatic plants | >1000mg/l         | 1             |
|                                            | EC50                                                                                                                                                                                                                                                                                                                     | 48h                | Crustacea                     | 7550mg/l          | 4             |
|                                            | EC50                                                                                                                                                                                                                                                                                                                     | 96h                | Algae or other aquatic plants | >1000mg/l         | 1             |
|                                            | EC50(ECx)                                                                                                                                                                                                                                                                                                                | 24h                | Algae or other aquatic plants | 0.011mg/L         | 4             |
|                                            | LC50                                                                                                                                                                                                                                                                                                                     | 96h                | Fish                          | >1400mg/L         | 4             |
| carbon dioxide                             | Endpoint                                                                                                                                                                                                                                                                                                                 | Test Duration (hr) | Species                       | Value             | Source        |
|                                            | LC50                                                                                                                                                                                                                                                                                                                     | 96h                | Fish                          | 35mg/l            | 1             |
| Legend:                                    | 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 |                    |                               |                   |               |

Very 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.

When spilled this product may act as a typical oil, causing a film, sheen, emulsion or sludge at or beneath the surface of the body of water. The oil film on water surface may physically affect the aquatic organisms, due to the interruption of the oxygen transfer between the air and the water

Oils of any kind can cause:

- drowning of water-fowl due to lack of buoyancy, loss of insulating capacity of feathers, starvation and vulnerability to predators due to lack of mobility
- lethal effects on fish by coating gill surfaces, preventing respiration
- asphyxiation of benthic life forms when floating masses become engaged with surface debris and settle on the bottom and
- adverse aesthetic effects of fouled shoreline and beaches

In case of accidental releases on the soil, a fine film is formed on the soil, which prevents the plant respiration process and the soil particle saturation. It may cause deep water infestation.

For Isopropanol (IPA):

log Kow: -0.16- 0.28;

Half-life (hr) air: 33-84;

Half-life (hr) H2O surface water: 130;

Henry's atm m3 /mol: 8.07E-06;

BOD 5: 1.19,60%;  
COD: 1.61-2.30, 97%;  
ThOD: 2.4;  
BOD 20: >70%.

Environmental Fate: IPA is expected to partition primarily to the aquatic compartment (77.7%) with the remainder to the air (22.3%). Overall, IPA presents a low potential hazard to aquatic or terrestrial biota.

Aquatic Fate: IPA has been shown to biodegrade rapidly in aerobic, aqueous biodegradation tests and therefore, would not be expected to persist in aquatic habitats.

For n-Heptane: Log Kow: 4.66; Koc: 2400-8100; Half-life (hr) Air: 52.8; Half-life (hr) Surface Water: 2.9-312; Henry's atm m3 /mol: 2.06; BOD 5 (if unstated): 1.92; COD: 0.06; BCF: 340-2000; Log BCF: 2.53-3.31.

Atmospheric Fate: Breakdown of n-heptane by sunlight is not expected to be an important fate process. If released to the atmosphere, n-heptane is expected to exist entirely in the vapor phase, in ambient air. Reactions hydroxyl radicals in the atmosphere have been shown to be important.

For Ketones: Ketones, unless they are alpha, beta--unsaturated ketones, can be considered as narcosis or baseline toxicity compounds.

Aquatic Fate: Hydrolysis of ketones in water is thermodynamically favourable only for low molecular weight ketones. Reactions with water are reversible with no permanent change in the structure of the ketone substrate. Ketones are stable to water under ambient environmental conditions.

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

For n-Hexane: Log Kow: 3.17-3.94; Henry s Law Constant: 1.69 atm-m3 mol; Vapor Pressure: 150 mm Hg @ 25 C; Log Koc: 2.90 to 3.61. BOD 5, (if unstated): 2.21; COD: 0.04; ThOD: 3.52.

Atmospheric Fate: n-Hexane is not expected to be directly broken down by sunlight. The main atmospheric removal mechanism is through reactions with hydroxyl radicals, with an approximant half-life of 2.9 days.

For Acetone:

log Kow : -0.24;  
Half-life (hr) air : 312-1896;  
Half-life (hr) H2O surface water : 20;  
Henry's atm m3 /mol : 3.67E-05  
BOD 5: 0.31-1.76,46-55%  
COD: 1.12-2.07  
ThOD: 2.2BCF: 0.69.

Environmental Fate: The relatively long half-life allows acetone to be transported long distances from its emission source.

Atmospheric Fate: Acetone preferentially locates in the air compartment when released to the environment. In air, acetone is lost by photolysis and reaction with photochemically produced hydroxyl radicals; the estimated half-life of these combined processes is about 22 days.

Persistence and degradability

| Ingredient     | Persistence: Water/Soil   | Persistence: Air                 |
|----------------|---------------------------|----------------------------------|
| heptane        | LOW                       | LOW                              |
| n-hexane       | LOW                       | LOW                              |
| acetone        | LOW (Half-life = 14 days) | MEDIUM (Half-life = 116.25 days) |
| isopropanol    | LOW (Half-life = 14 days) | LOW (Half-life = 3 days)         |
| carbon dioxide | LOW                       | LOW                              |

Bioaccumulative potential

| Ingredient     | Bioaccumulation       |
|----------------|-----------------------|
| heptane        | HIGH (LogKOW = 4.66)  |
| n-hexane       | MEDIUM (LogKOW = 3.9) |
| acetone        | LOW (BCF = 0.69)      |
| isopropanol    | LOW (LogKOW = 0.05)   |
| carbon dioxide | LOW (LogKOW = 0.83)   |

Mobility in soil

| Ingredient     | Mobility               |
|----------------|------------------------|
| heptane        | LOW (Log KOC = 274.7)  |
| n-hexane       | LOW (Log KOC = 149)    |
| acetone        | HIGH (Log KOC = 1.981) |
| isopropanol    | HIGH (Log KOC = 1.06)  |
| carbon dioxide | HIGH (Log KOC = 1.498) |

SECTION 13 Disposal considerations

Waste treatment methods

|                              |                                                                                                                                                                                                                                                                                                     |
|------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product / Packaging disposal | 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.<br>A Hierarchy of Controls seems to be common - the user should investigate:<br>▸ 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.

- **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.**

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

|                  |                                                                                    |
|------------------|------------------------------------------------------------------------------------|
|                  |   |
| Marine Pollutant |  |
| HAZCHEM          | Not Applicable                                                                     |

### Land transport (UN)

|                                    |                           |                             |
|------------------------------------|---------------------------|-----------------------------|
| 14.1. UN number or ID number       | 1950                      |                             |
| 14.2. UN proper shipping name      | AEROSOLS                  |                             |
| 14.3. Transport hazard class(es)   | Class                     | 2.1                         |
|                                    | Subsidiary Hazard         | Not Applicable              |
| 14.4. Packing group                | Not Applicable            |                             |
| 14.5. Environmental hazard         | Environmentally hazardous |                             |
| 14.6. Special precautions for user | Special provisions        | 63; 190; 277; 327; 344; 381 |
|                                    | Limited quantity          | 1000ml                      |

### Air transport (ICAO-IATA / DGR)

|                                    |                                             |                   |
|------------------------------------|---------------------------------------------|-------------------|
| 14.1. UN number                    | 1950                                        |                   |
| 14.2. UN proper shipping name      | Aerosols, flammable (engine starting fluid) |                   |
| 14.3. Transport hazard class(es)   | ICAO/IATA Class                             | 2.1               |
|                                    | ICAO / IATA Subsidiary Hazard               | Not Applicable    |
|                                    | ERG Code                                    | 10L               |
| 14.4. Packing group                | Not Applicable                              |                   |
| 14.5. Environmental hazard         | Environmentally hazardous                   |                   |
| 14.6. Special precautions for user | Special provisions                          | A1 A145 A167 A802 |
|                                    | Cargo Only Packing Instructions             | 203               |

|  |                                                           |           |
|--|-----------------------------------------------------------|-----------|
|  | Cargo Only Maximum Qty / Pack                             | 150 kg    |
|  | Passenger and Cargo Packing Instructions                  | Forbidden |
|  | Passenger and Cargo Maximum Qty / Pack                    | Forbidden |
|  | Passenger and Cargo Limited Quantity Packing Instructions | Forbidden |
|  | Passenger and Cargo Limited Maximum Qty / Pack            | Forbidden |

Sea transport (IMDG-Code / GGVSee)

|                                    |                        |                            |
|------------------------------------|------------------------|----------------------------|
| 14.1. UN number                    | 1950                   |                            |
| 14.2. UN proper shipping name      | AEROSOLS               |                            |
| 14.3. Transport hazard class(es)   | IMDG Class             | 2.1                        |
|                                    | IMDG Subsidiary Hazard | Not Applicable             |
| 14.4. Packing group                | Not Applicable         |                            |
| 14.5 Environmental hazard          | Marine Pollutant       |                            |
| 14.6. Special precautions for user | 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          |
|--------------------------------------------|----------------|
| naphtha petroleum, light aliphatic solvent | Not Applicable |
| heptane                                    | Not Applicable |
| n-hexane                                   | Not Applicable |
| acetone                                    | Not Applicable |
| isopropanol                                | Not Applicable |
| carbon dioxide                             | Not Applicable |

14.7.3. Transport in bulk in accordance with the IGC Code

| Product name                               | Ship Type      |
|--------------------------------------------|----------------|
| naphtha petroleum, light aliphatic solvent | Not Applicable |
| heptane                                    | Not Applicable |
| n-hexane                                   | Not Applicable |
| acetone                                    | Not Applicable |
| isopropanol                                | Not Applicable |
| carbon dioxide                             | 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                           |
|------------|------------------------------------------|
| HSR002515  | Aerosols (Flammable) Group Standard 2017 |

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

naphtha petroleum, light aliphatic solvent 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 Inventory of Chemicals (NZIoC)                                                                                        |
| New Zealand Land Transport Rule; Dangerous Goods 2005 - Schedule 2 Dangerous Goods in Limited Quantities and Consumer Commodities |
| New Zealand Workplace Exposure Standards (WES)                                                                                    |

**heptane is found on the following regulatory lists**

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

**n-hexane 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)                                                                    |

**acetone is found on the following regulatory lists**

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

**isopropanol is found on the following regulatory lists**

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

**carbon dioxide is found on the following regulatory lists**

|                                                                                                                   |
|-------------------------------------------------------------------------------------------------------------------|
| FEI Equine Prohibited Substances List - Controlled Medication                                                     |
| FEI Equine Prohibited Substances List (EPSL)                                                                      |
| 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)                                                                    |

**Additional Regulatory Information**

Not Applicable

**Hazardous Substance Location**

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

| Hazard Class | Quantity (Closed Containers)       | Quantity (Open Containers)         |
|--------------|------------------------------------|------------------------------------|
| 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.

| 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                                      | Yes                                                                                                                                                                                                             |
| Canada - NDSL                                     | No (naphtha petroleum, light aliphatic solvent; heptane; n-hexane; acetone; isopropanol; carbon dioxide)                                                                                                        |
| China - IECSC                                     | Yes                                                                                                                                                                                                             |
| Europe - EINEC / ELINCS / NLP                     | Yes                                                                                                                                                                                                             |
| Japan - ENCS                                      | Yes                                                                                                                                                                                                             |
| Korea - KECI                                      | Yes                                                                                                                                                                                                             |
| 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                                     | Yes                                                                                                                                                                                                             |
| Vietnam - NCI                                     | Yes                                                                                                                                                                                                             |
| Russia - FBEPH                                    | Yes                                                                                                                                                                                                             |
| UAE - Control List (Banned/Restricted Substances) | No (naphtha petroleum, light aliphatic solvent; heptane; n-hexane; acetone; isopropanol; carbon dioxide)                                                                                                        |
| Legend:                                           | <b>Yes = All CAS declared ingredients are on the inventory</b><br><b>No = One or more of the CAS listed ingredients are not on the inventory. These ingredients may be exempt or will require registration.</b> |

SECTION 16 Other information

|               |            |
|---------------|------------|
| Revision Date | 10/04/2025 |
| Initial Date  | 19/04/2016 |

SDS Version Summary

| Version | Date of Update | Sections Updated                                                      |
|---------|----------------|-----------------------------------------------------------------------|
| 7.1     | 10/03/2023     | Classification change due to full database hazard calculation/update. |
| 8.1     | 10/04/2025     | Hazards identification - Classification                               |

Other information

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

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

Definitions and abbreviations

- PC - TWA: Permissible Concentration-Time Weighted Average
- PC - STEL: Permissible Concentration-Short Term Exposure Limit
- IARC: International Agency for Research on Cancer
- ACGIH: American Conference of Governmental Industrial Hygienists
- STEL: Short Term Exposure Limit
- TEEL: Temporary Emergency Exposure Limit,
- IDLH: Immediately Dangerous to Life or Health Concentrations
- 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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