# CRC Oil Fighter

## CRC Industries (CRC Industries New Zealand)

Chemwatch Hazard Alert Code: 3

Chemwatch: **5360-82**
Version No: **7.1**
Safety Data Sheet according to the Health and Safety at Work (Hazardous Substances) Regulations 2017

Issue Date: **19/11/2021**
Print Date: **28/10/2024**
S.GHS.NZL.EN

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

### Product Identifier

| | |
|---|---|
| **Product name** | CRC Oil Fighter |
| **Chemical Name** | Not Applicable |
| **Synonyms** | CRC Oil Eater |
| **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 based liquid for cleaning oil.<br>Application is by spray atomisation from a hand held aerosol pack |

### Details of the manufacturer or supplier of the safety data sheet

| | |
|---|---|
| **Registered company name** | **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** | www.crc.co.nz |
| **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 |
| **Other emergency telephone number(s)** | 111 (NZ Emergency Services) | +61 3 9573 3188 |

**Once connected and if the message is not in your preferred language then please dial 01**

## SECTION 2 Hazards identification

### Classification of the substance or mixture

| | |
|---|---|
| **Classification [1]** | Aerosols, Hazard Category 1, Aspiration Hazard Category 1, Sensitisation (Skin) Category 1, Serious Eye Damage/Eye Irritation Category 2, Hazardous to the Aquatic Environment Long-Term Hazard Category 2, Hazardous to Soil Organisms |
| ***Legend:*** | ***1. Classified by Chemwatch; 2. Classification drawn from CCID EPA NZ; 3. Classification drawn from Regulation (EU) No 1272/2008 - Annex VI*** |
| **Determined by Chemwatch using GHS/HSNO criteria** | 2.1.2A, 6.1E (aspiration), 6.4A, 6.5B (contact), 9.1B, 9.2C |

### Label elements

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

| | |
|---|---|
| **Signal word** | **Danger** |

### Hazard statement(s)

| | |
|---|---|
| **H222+H229** | Extremely flammable aerosol. Pressurized container: may burst if heated. |
| **H304** | May be fatal if swallowed and enters airways. |
| **H317** | May cause an allergic skin reaction. |
| **H319** | Causes serious eye irritation. |
| **H411** | Toxic to aquatic life with long lasting effects. |
| **H423** | Hazardous to soil organisms. |

### Precautionary statement(s) Prevention

| | |
|---|---|
| **P210** | Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. |
| **P211** | Do not spray on an open flame or other ignition source. |
| **P251** | Do not pierce or burn, even after use. |
| **P280** | Wear protective gloves, protective clothing, eye protection and face protection. |

### Precautionary statement(s) Response

| | |
|---|---|
| **P301+P310** | IF SWALLOWED: Immediately call a POISON CENTER/doctor/physician/first aider. |
| **P331** | Do NOT induce vomiting. |
| **P302+P352** | IF ON SKIN: Wash with plenty of water and soap. |
| **P305+P351+P338** | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |

### Precautionary statement(s) Storage

| | |
|---|---|
| **P405** | Store locked up. |
| **P410+P412** | Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F. |

### Precautionary statement(s) Disposal

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

## SECTION 3 Composition / information on ingredients

### Substances

See section below for composition of Mixtures

### Mixtures

| CAS No | %[weight] | Name |
|---|---|---|
| 108-65-6 | 30-40 | propylene glycol monomethyl ether - mixture of isomers |
| 5989-27-5 | 10-20 | d-limonene |
| 8008-20-6 | 5-10 | kerosene |
| 68512-91-4 | 20-40 | hydrocarbons, C3-4 rich, petroleum distillate |

| | |
|---|---|
| ***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

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|---|---|
| **Eye Contact** | If aerosols come in contact with the eyes:<br>▸ Immediately hold the eyelids apart and flush the eye continuously for at least 15 minutes with fresh running water.<br>▸ 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.<br>▸ Transport to hospital or doctor without delay.<br>▸ Removal of contact lenses after an eye injury should only be undertaken by skilled personnel. |

| | |
|---|---|
| **Skin Contact** | If solids or aerosol mists are deposited upon the skin:<br>▸ Flush skin and hair with running water (and soap if available).<br>▸ Remove any adhering solids with industrial skin cleansing cream.<br>▸ **DO NOT** use solvents.<br>▸ Seek medical attention in the event of irritation. |
| **Inhalation** | If aerosols, fumes or combustion products are inhaled:<br>▸ Remove to fresh air.<br>▸ Lay patient down. Keep warm and rested.<br>▸ Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures.<br>▸ 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.<br>▸ Transport to hospital, or doctor. |
| **Ingestion** | ▸ Avoid giving milk or oils.<br>▸ Avoid giving alcohol.<br>Not considered a normal route of entry. |

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

For petroleum distillates
· In case of ingestion, gastric lavage with activated charcoal can be used promptly to prevent absorption - decontamination (induced emesis or lavage) is controversial and should be considered on the merits of each individual case; of course the usual precautions of an endotracheal tube should be considered prior to lavage, to prevent aspiration.
· Individuals intoxicated by petroleum distillates should be hospitalized immediately, with acute and continuing attention to neurologic and cardiopulmonary function.
· Positive pressure ventilation may be necessary.
· Acute central nervous system signs and symptoms may result from large ingestions of aspiration-induced hypoxia.
· After the initial episode,individuals should be followed for changes in blood variables and the delayed appearance of pulmonary oedema and chemical pneumonitis. Such patients should be followed for several days or weeks for delayed effects, including bone marrow toxicity, hepatic and renal impairment Individuals with chronic pulmonary disease will be more seriously impaired, and recovery from inhalation exposure may be complicated.
· Gastrointestinal symptoms are usually minor and pathological changes of the liver and kidneys are reported to be uncommon in acute intoxications.
· Chlorinated and non-chlorinated hydrocarbons may sensitize the heart to epinephrine and other circulating catecholamines so that arrhythmias may occur.Careful consideration of this potential adverse effect should precede administration of epinephrine or other cardiac stimulants and the selection of bronchodilators.
Treat symptomatically.
Any material aspirated during vomiting may produce lung injury. Therefore emesis should not be induced mechanically or pharmacologically. Mechanical means should be used if it is considered necessary to evacuate the stomach contents; these include gastric lavage after endotracheal intubation. If spontaneous vomiting has occurred after ingestion, the patient should be monitored for difficult breathing, as adverse effects of aspiration into the lungs may be delayed up to 48 hours.

## 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

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|---|---|
| **Fire Incompatibility** | ▸ Avoid contamination with oxidising agents i.e. nitrates, oxidising acids, chlorine bleaches, pool chlorine etc. as ignition may result |

### Advice for firefighters

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|---|---|
| **Fire Fighting** | ▸ Alert Fire Brigade and tell them location and nature of hazard.<br>▸ May be violently or explosively reactive.<br>▸ Wear breathing apparatus plus protective gloves.<br>▸ Prevent, by any means available, spillage from entering drains or water course. |
| **Fire/Explosion Hazard** | ▸ Liquid and vapour are highly flammable.<br>▸ Severe fire hazard when exposed to heat or flame.<br>▸ Vapour forms an explosive mixture with air.<br>▸ Severe explosion hazard, in the form of vapour, when exposed to flame or spark.<br>Combustion products include:<br>carbon dioxide (CO2)<br>other pyrolysis products typical of burning organic material.<br>**Contains low boiling substance:** Closed containers may rupture due to pressure buildup under fire conditions. |

## SECTION 6 Accidental release measures

### Personal precautions, protective equipment and emergency procedures

See section 8

### Environmental precautions

See section 12

### Methods and material for containment and cleaning up

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|---|---|
| **Minor Spills** | ▸ Clean up all spills immediately.<br>▸ Avoid breathing vapours and contact with skin and eyes.<br>▸ Wear protective clothing, impervious gloves and safety glasses.<br>▸ Shut off all possible sources of ignition and increase ventilation. |
| **Major Spills** | ▸ Clear area of personnel and move upwind.<br>▸ Alert Fire Brigade and tell them location and nature of hazard.<br>▸ May be violently or explosively reactive.<br>▸ Wear breathing apparatus plus protective gloves. |

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

## SECTION 7 Handling and storage

### Precautions for safe handling

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|---|---|
| **Safe handling** | 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.<br>▸ **DO NOT** allow clothing wet with material to stay in contact with skin<br>▸ Avoid all personal contact, including inhalation.<br>▸ Wear protective clothing when risk of exposure occurs.<br>▸ Use in a well-ventilated area.<br>▸ Prevent concentration in hollows and sumps. |
| **Other information** | Consider storage under inert gas.<br>▸ Keep dry to avoid corrosion of cans. Corrosion may result in container perforation and internal pressure may eject contents of can<br>▸ Store in original containers in approved flammable liquid storage area.<br>▸ **DO NOT** store in pits, depressions, basements or areas where vapours may be trapped.<br>▸ No smoking, naked lights, heat or ignition sources.<br>▸ Keep containers securely sealed. |

### Conditions for safe storage, including any incompatibilities

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|---|---|
| **Suitable container** | ▸ Aerosol dispenser.<br>▸ Check that containers are clearly labelled. |
| **Storage incompatibility** | ▸ Avoid reaction with oxidising agents |

## 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) | propylene glycol monomethyl ether - mixture of isomers | Propylene glycol monomethyl ether | 100 ppm / 369 mg/m3 | 553 mg/m3 / 150 ppm | Not Available | Not Available |
| New Zealand Workplace Exposure Standards (WES) | kerosene | Oil mist, mineral | 5 mg/m3 | 10 mg/m3 | Not Available | (om) - Sampled by a method that does not collect vapour |

| Ingredient | Original IDLH | Revised IDLH |
|---|---|---|
| propylene glycol monomethyl ether - mixture of isomers | Not Available | Not Available |
| d-limonene | Not Available | Not Available |
| kerosene | 2,500 mg/m3 | Not Available |
| hydrocarbons, C3-4 rich, petroleum distillate | Not Available | Not Available |

**Occupational Exposure Banding**

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

## Exposure controls

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|---|---|
| **Appropriate engineering controls** | **Care**: Atmospheres in bulk storages and even apparently empty tanks may be hazardous by oxygen depletion. Atmosphere must be checked before entry.<br><br>Requirements of State Authorities concerning conditions for tank entry must be met. Particularly with regard to training of crews for tank entry; work permits; sampling of atmosphere; provision of rescue harness and protective gear as needed<br>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.<br>The basic types of engineering controls are:<br>Process controls which involve changing the way a job activity or process is done to reduce the risk.<br>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. |
| **Individual protection measures, such as personal protective equipment** |  |
| **Eye and face protection** | ‣ No special equipment for minor exposure i.e. when handling small quantities.<br>‣ OTHERWISE: For potentially moderate or heavy exposures:<br>‣ Safety glasses with side shields.<br>‣ NOTE: Contact lenses pose a special hazard; soft lenses may absorb irritants and ALL lenses concentrate them. |
| **Skin protection** | See Hand protection below |
| **Hands/feet protection** | ‣ No special equipment needed when handling small quantities.<br>‣ OTHERWISE:<br>‣ For potentially moderate exposures:<br>‣ Wear general protective gloves, eg. light weight rubber gloves.<br>‣ For potentially heavy exposures:<br>‣ Wear chemical protective gloves, eg. PVC. and safety footwear. |
| **Body protection** | See Other protection below |
| **Other protection** | No special equipment needed when handling small quantities.<br>**OTHERWISE:**<br>‣ Overalls.<br>‣ Skin cleansing cream.<br>‣ Eyewash unit. |

## 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 Oil Fighter

| Material | CPI |
|---|---|
| NITRILE | A |
| PVA | A |
| VITON | A |

* CPI - Chemwatch Performance Index
A: Best Selection
B: Satisfactory; may degrade after 4 hours continuous immersion
C: Poor to Dangerous Choice for other than short term immersion
**NOTE**: As a series of factors will influence the actual performance of the glove, a final selection must be based on detailed observation. -
* Where the glove is to be used on a short term, casual or infrequent basis, factors such as "feel" or convenience (e.g. disposability), may dictate a choice of gloves which might otherwise be unsuitable following long-term or frequent use. A qualified practitioner should be consulted.

### Ansell Glove Selection

| **Glove** — *In order of recommendation* |
|---|

## Respiratory protection

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

^ - Full-face
A(All classes) = Organic vapours, B AUS or B1 = Acid gasses, B2 = Acid gas or hydrogen cyanide(HCN), B3 = Acid gas or hydrogen cyanide(HCN), E = Sulfur dioxide(SO2), G = Agricultural chemicals, K = Ammonia(NH3), Hg = Mercury, NO = Oxides of nitrogen, MB = Methyl bromide, AX = Low boiling point organic compounds(below 65 degC)

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

| |
|---|
| AlphaTec® Solvex® 37-185 |
| AlphaTec® 58-008 |
| AlphaTec® 58-530B |
| AlphaTec® 58-530W |
| AlphaTec® 58-735 |
| AlphaTec® 79-700 |
| AlphaTec® 15-554 |
| AlphaTec® 38-612 |
| AlphaTec® Solvex® 37-675 |
| AlphaTec® 53-001 |

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

## SECTION 9 Physical and chemical properties

### Information on basic physical and chemical properties

| | |
|---|---|
| **Appearance** | Opaque highly flammable liquid with solvent odour; does not mix with water. |

| | | | |
|---|---|---|---|
| **Physical state** | Liquid | **Relative density (Water = 1)** | 0.7 @20C |
| **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)** | 55 | **Molecular weight (g/mol)** | Not Applicable |
| **Flash point (°C)** | -26 | **Taste** | Not Available |
| **Evaporation rate** | Not Applicable | **Explosive properties** | Not Available |
| **Flammability** | HIGHLY FLAMMABLE. | **Oxidising properties** | Not Available |
| **Upper Explosive Limit (%)** | 9.4 | **Surface Tension (dyn/cm or mN/m)** | Not Available |
| **Lower Explosive Limit (%)** | 1.1 | **Volatile Component (%vol)** | Not Available |
| **Vapour pressure (kPa)** | Not Available | **Gas group** | Not Available |
| **Solubility in water** | Immiscible | **pH as a solution (1%)** | Not Applicable |
| **Vapour density (Air = 1)** | Not Available | **VOC g/L** | Not Available |
| **Heat of Combustion (kJ/g)** | Not Available | **Ignition Distance (cm)** | Not Available |
| **Flame Height (cm)** | Not Available | **Flame Duration (s)** | Not Available |
| **Enclosed Space Ignition Time Equivalent (s/m3)** | Not Available | **Enclosed Space Ignition Deflagration Density (g/m3)** | Not Available |

## SECTION 10 Stability and reactivity

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|---|---|
| **Reactivity** | See section 7 |
| **Chemical stability** | ▸ Elevated temperatures.<br>▸ Presence of open flame.<br>▸ Product is considered stable.<br>▸ Hazardous polymerisation will not occur.<br>▸ Presence of elevated temperatures.<br>▸ Presence of heat source<br>▸ Presence of an ignition source |
| **Possibility of hazardous reactions** | See section 7 |
| **Conditions to avoid** | See section 7 |
| **Incompatible materials** | See section 7 |
| **Hazardous decomposition products** | See section 5 |

## SECTION 11 Toxicological information

### Information on toxicological effects

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|---|---|
| **Inhaled** | Inhalation hazard is increased at higher temperatures.<br>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.<br>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.<br>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.<br>The use of a quantity of material in an unventilated or confined space may result in increased exposure and an irritating atmosphere developing. Before starting consider control of exposure by mechanical ventilation.<br>**WARNING**:Intentional misuse by concentrating/inhaling contents may be lethal.<br>Spray mist may produce discomfort |
| **Ingestion** | 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>Swallowing of the liquid may cause aspiration into the lungs with the risk of chemical pneumonitis; serious consequences may result. (ICSC13733) |
| **Skin Contact** | The material may cause mild but significant inflammation of the skin either following direct contact or after a delay of some time.<br>Repeated exposure can cause contact dermatitis which is characterised by redness, swelling and blistering.<br>Repeated exposure may cause skin cracking, flaking or drying following normal handling and use.<br>Spray mist may produce discomfort<br>Open cuts, abraded or irritated skin should not be exposed to this material<br>Entry into the blood-stream, through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects.<br>Examine the skin prior to the use of the material and ensure that any external damage is suitably protected. |
| **Eye** | Evidence exists, or practical experience predicts, that the material may cause eye irritation in a substantial number of individuals.<br>Prolonged eye contact may cause inflammation characterised by a temporary redness of the conjunctiva (similar to windburn).<br>The vapour when concentrated has pronounced eye irritation effects and this gives some warning of high vapour concentrations.<br>If eye irritation occurs seek to reduce exposure with available control measures, or evacuate area.<br>The liquid may produce eye discomfort and is capable of causing temporary impairment of vision and/or transient eye inflammation, ulceration |
| **Chronic** | Skin contact with the material is more likely to cause a sensitisation reaction in some persons compared to the general population.<br>Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure.<br>There is some evidence from animal testing that exposure to this material may result in toxic effects to the unborn baby.<br>Some glycol esters and their ethers cause wasting of the testicles, reproductive changes, infertility and changes to kidney function. Shorter chain compounds are more dangerous.<br>Main route of exposure to the gas in the workplace is by inhalation.<br>**WARNING**: Aerosol containers may present pressure related hazards.<br>Constant or exposure over long periods to mixed hydrocarbons may produce stupor with dizziness, weakness and visual disturbance, weight loss and anaemia, and reduced liver and kidney function. Skin exposure may result in drying and cracking and redness of the skin. |

| | TOXICITY | IRRITATION |
|---|---|---|
| **CRC Oil Fighter** | Not Available | Not Available |
| **propylene glycol monomethyl ether - mixture of isomers** | dermal (rat) LD50: >2000 mg/kg[1] | Eye (Rodent - rabbit): 100mg - Severe |
| | Oral (Rat) LD50: 3739 mg/kg[2] | Eye (Rodent - rabbit): 500mg/24H - Mild |
| | | Eye: no adverse effect observed (not irritating)[1] |
| | | Skin (Rodent - rabbit): 500mg - Mild |
| | | Skin: no adverse effect observed (not irritating)[1] |
| **d-limonene** | Dermal (rabbit) LD50: >5000 mg/kg[2] | Eye: no adverse effect observed (not irritating)[1] |
| | Oral (Rat) LD50: >2000 mg/kg[1] | Skin (Rodent - mouse): 700mg/7D (intermittent) - Severe |
| | | Skin (Rodent - rabbit): 10%/24H - Mild |
| | | Skin (Rodent - rabbit): 500mg/24H - Moderate |
| | | Skin (Rodent - rat): 100%/1H |
| | | Skin: no adverse effect observed (not irritating)[1] |
| **kerosene** | Dermal (rabbit) LD50: >2000 mg/kg[2] | Eye (Rodent - rabbit): 0.1mL |

| | | |
|---|---|---|
| | Inhalation (Rat) LC50: >4.3 mg/l4h[1] | Eye (Rodent - rabbit): 0.1mL |
| | Oral (Rat) LD50: >5000 mg/kg[2] | Eye (Rodent - rabbit): 100mg/24H - Mild |
| | | Eye: no adverse effect observed (not irritating)[1] |
| | | Skin (Human): 100%/12H |
| | | Skin (Rodent - rabbit): 0.5mL - Moderate |
| | | Skin (Rodent - rabbit): 100%/24H - Moderate |
| | | Skin (Rodent - rabbit): 500mg - Severe |
| | | Skin (Rodent - rabbit): 500mg/24H - Mild |
| | | Skin: adverse effect observed (irritating)[1] |

| **hydrocarbons, C3-4 rich, petroleum distillate** | **TOXICITY** | **IRRITATION** |
|---|---|---|
| | dermal (mammal) LD50: >5640 mg/kg[1] | Eye: adverse effect observed (irritating)[1] |
| | Inhalation (Rat) LC50: 10000 ppm4h[1] | Skin: adverse effect observed (irritating)[1] |
| | Oral (Rat) LD50: >2000 mg/kg[1] | |

| | |
|---|---|
| ***Legend:*** | ***1. Value obtained from Europe ECHA Registered Substances - Acute toxicity 2. Value obtained from manufacturer's SDS. Unless otherwise specified data extracted from RTECS - Register of Toxic Effect of chemical Substances*** |

| | |
|---|---|
| **PROPYLENE GLYCOL MONOMETHYL ETHER - MIXTURE OF ISOMERS** | NOTE: Exposure of pregnant rats and rabbits to the substance did not give rise to teratogenic effects at concentrations up to 3000 ppm. Fetotoxic effects were seen in rats but not in rabbits at this concentration; maternal toxicity was noted in both species.<br>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.<br>For propylene glycol ethers (PGEs):<br>Typical propylene glycol ethers include propylene glycol n-butyl ether (PnB); dipropylene glycol n-butyl ether (DPnB); dipropylene glycol methyl ether acetate (DPMA) and tripropylene glycol methyl ether (TPM).<br>Testing of a wide variety of propylene glycol ethers has shown that propylene glycol-based ethers are less toxic than some ethers of the ethylene series. The common toxicities associated with the lower molecular weight homologues of the ethylene series, such as adverse effects on the reproductive organs, the developing embryo and foetus, blood or thymus gland, are not seen with the commercial-grade propylene glycol ethers. In the ethylene series, metabolism of the terminal hydroxyl group produces and alkoxyacetic acid. The reproductive and developmental toxicities of the lower molecular weight homologues in the ethylene series are due specifically to the formation of methoxyacetic and ethoxyacetic acids.<br>Longer chain homologues in the ethylene series are not associated with reproductive toxicity, but can cause haemolysis in sensitive species, also through formation of an alkoxyacetic acid.<br>The material may be irritating to the eye, with prolonged contact causing inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.<br>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. |
| **D-LIMONENE** | Tumorigenic by RTECS criteria<br>The following information refers to contact allergens as a group and may not be specific to this product.<br>Contact allergies quickly manifest themselves as contact eczema, more rarely as urticaria or Quincke's oedema. The pathogenesis of contact eczema involves a cell-mediated (T lymphocytes) immune reaction of the delayed type. Other allergic skin reactions, e.g. contact urticaria, involve antibody-mediated immune reactions.<br>d-Limonene is readily absorbed by inhalation and swallowing. Absorption through the skin is reported to the lower than by inhalation. It is rapidly distributed to different tissues in the body, readily metabolized and eliminated, primary through the urine. Limonene shows low acute toxicity by all three routes in animals. Limonene is a skin irritant in both experimental animals and humans.<br>Adverse reactions to fragrances in perfumes and fragranced cosmetic products include allergic contact dermatitis, irritant contact dermatitis, sensitivity to light, immediate contact reactions, and pigmented contact dermatitis. Airborne and connubial contact dermatitis occurs. Contact allergy is a lifelong condition, so symptoms may occur on re-exposure. Allergic contact dermatitis can be severe and widespread, with significant impairment of quality of life and potential consequences for fitness for work.<br>If the perfume contains a sensitizing component, intolerance to perfumes by inhalation may occur.<br>Fragrance allergens act as haptens, which are small molecules that cause an immune reaction only when attached to a carrier protein. However, not all sensitizing fragrance chemicals are directly reactive, but some require previous activation. A prehapten is a chemical that itself causes little or no sensitization, but it is transformed into a hapten outside the skin by a chemical reaction (oxidation in air or reaction with light) without the requirement of an enzyme.<br>For prehaptens, it is possible to prevent activation outside the body to a certain extent by different measures, for example, prevention of air exposure during handling and storage of the ingredients and the final product, and by the addition of suitable antioxidants. When antioxidants are used, care should be taken that they will not be activated themselves, and thereby form new sensitisers.<br>Prehaptens: Most terpenes with oxidisable allylic positions can be expected to self-oxidise on air exposure.<br>The substance is classified by IARC as Group 3:<br>**NOT** classifiable as to its carcinogenicity to humans.<br>Evidence of carcinogenicity may be inadequate or limited in animal testing. |

| | |
|---|---|
| | Monomethyltin chloride, thioglycolate esters, and tall oil ester reaction product:<br>Monomethyltin trichloride (MMTC, CAS RN: 993-16-8), monomethyltin tris[2-ethylhexylmercaptoacetate (MMT (EHTG; MMT (2-EHMA), CAS RN: 57583-34-3), monomethyltin tris[isooctylmercaptoacetate (MMT(IOTG), CAS RN: 54849-38-6) and methyltin reverse ester tallate reaction product (TERP, CAS RNs: 201687-58-3, 201687-57-2, 68442-12-6, 151436-98-5) are considered one category of compounds for mammalian studies via the oral route. The justification for this category is based on structural similarities and the demonstrated rapid conversion of all of the esters to the MMTC when placed in simulated mammalian gastric contents [0.07M HCl] under physiological conditions. For the MMT(EHTG) >90% conversion to MMTC occurred within 0.5 hours. For TERP, 68% of the monomethyltin portion of the compound was converted to MMTC within 1 hour. |
| **KEROSENE** | 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.<br>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.<br>Petroleum contains aromatic (benzene, toluene, ethyl benzene, napthalene) and aliphatic hydrocarbons (n-hexane), which can result in many detrimental health effects, including, cancer, tumour formation, hearing loss, and nervous system toxicity.<br>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.<br>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).<br>Animal studies show concentrations of toluene (>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.<br>Prolonged contact with petroleum may result in skin inflammation and make the skin more sensitive to irritation and penetration by other materials.<br>The material may cause severe 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. Repeated exposures may produce severe ulceration.<br>Kerosene may produce varying ranges of skin irritation, and a reversible eye irritation (if eyes are washed). Skin may be cracked or flaky and/or leathery, with crusts and/or hair loss. It may worsen skin cancers. There may also be loss of weight, discharge from the nose, excessive tiredness, and wheezing. |
| **HYDROCARBONS, C3-4 RICH, PETROLEUM DISTILLATE** | inhalation of the gas |
| **PROPYLENE GLYCOL MONOMETHYL ETHER - MIXTURE OF ISOMERS & HYDROCARBONS, C3-4 RICH, PETROLEUM DISTILLATE** | No significant acute toxicological data identified in literature search. |

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

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

## SECTION 12 Ecological information

### Toxicity

**CRC Oil Fighter**

| Endpoint | Test Duration (hr) | Species | Value | Source |
|---|---|---|---|---|
| Not Available | Not Available | Not Available | Not Available | Not Available |

**propylene glycol monomethyl ether - mixture of isomers**

| Endpoint | Test Duration (hr) | Species | Value | Source |
|---|---|---|---|---|
| EC50 | 72h | Algae or other aquatic plants | >1000mg/l | 2 |
| NOEC(ECx) | 336h | Fish | 47.5mg/l | 2 |
| EC50 | 48h | Crustacea | 373mg/l | 2 |
| LC50 | 96h | Fish | 100-180mg/l | 2 |
| EC50 | 96h | Algae or other aquatic plants | >1000mg/l | 2 |

**d-limonene**

| Endpoint | Test Duration (hr) | Species | Value | Source |
|---|---|---|---|---|
| EC50 | 72h | Algae or other aquatic plants | 0.214mg/l | 2 |

| | | | | | |
|---|---|---|---|---|---|
| | EC50 | 48h | Crustacea | 0.307mg/l | 2 |
| | LC50 | 96h | Fish | 0.46mg/l | 2 |
| | NOEC(ECx) | 0h | Algae or other aquatic plants | <0.05-1.5mg/L | 4 |

**kerosene**

| Endpoint | Test Duration (hr) | Species | Value | Source |
|---|---|---|---|---|
| Not Available | Not Available | Not Available | Not Available | Not Available |

**hydrocarbons, C3-4 rich, petroleum distillate**

| Endpoint | Test Duration (hr) | Species | Value | Source |
|---|---|---|---|---|
| EC50 | 72h | Algae or other aquatic plants | 32mg/l | 2 |
| EC50 | 48h | Crustacea | 10mg/l | 2 |
| LC50 | 96h | Fish | 5.3mg/l | 2 |
| NOEC(ECx) | 768h | Fish | 0.8mg/l | 2 |
| EC50 | 96h | Algae or other aquatic plants | 7.039mg/l | 2 |

***Legend:*** ***Extracted from 1. IUCLID Toxicity Data 2. Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity 4. US EPA, Ecotox database - Aquatic Toxicity Data 5. ECETOC Aquatic Hazard Assessment Data 6. NITE (Japan) - Bioconcentration Data 7. METI (Japan) - Bioconcentration Data 8. Vendor Data***

Toxic to aquatic organisms.
**DO NOT** discharge into sewer or waterways.

### Persistence and degradability

| Ingredient | Persistence: Water/Soil | Persistence: Air |
|---|---|---|
| propylene glycol monomethyl ether - mixture of isomers | LOW (Half-life = 56 days) | LOW (Half-life = 1.7 days) |
| d-limonene | HIGH | HIGH |

### Bioaccumulative potential

| Ingredient | Bioaccumulation |
|---|---|
| propylene glycol monomethyl ether - mixture of isomers | LOW (BCF = 2) |
| d-limonene | HIGH (LogKOW = 4.8275) |

### Mobility in soil

| Ingredient | Mobility |
|---|---|
| propylene glycol monomethyl ether - mixture of isomers | HIGH (Log KOC = 1) |
| d-limonene | LOW (Log KOC = 1324) |

## SECTION 13 Disposal considerations

### Waste treatment methods

**Product / Packaging disposal**

- **DO NOT** allow wash water from cleaning or process equipment to enter drains.
- It may be necessary to collect all wash water for treatment before disposal.
- In all cases disposal to sewer may be subject to local laws and regulations and these should be considered first.
- Where in doubt contact the responsible authority.
- Consult State Land Waste Management Authority for disposal.
- Discharge contents of damaged aerosol cans at an approved site.
- Allow small quantities to evaporate.
- **DO NOT** incinerate or puncture aerosol cans.

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<br>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<br>Limited quantity: 1000ml |

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

| | |
|---|---|
| 14.1. **UN number** | 1950 |
| 14.2. **UN proper shipping name** | Aerosols, flammable |
| 14.3. **Transport hazard class(es)** | ICAO/IATA Class: 2.1<br>ICAO / IATA Subsidiary Hazard: Not Applicable<br>ERG Code: 10L |
| 14.4. **Packing group** | Not Applicable |
| 14.5. **Environmental hazard** | Environmentally hazardous |
| 14.6. **Special precautions for user** | Special provisions: A145 A167 A802<br>Cargo Only Packing Instructions: 203<br>Cargo Only Maximum Qty / Pack: 150 kg<br>Passenger and Cargo Packing Instructions: 203<br>Passenger and Cargo Maximum Qty / Pack: 75 kg<br>Passenger and Cargo Limited Quantity Packing Instructions: Y203<br>Passenger and Cargo Limited Maximum Qty / Pack: 30 kg G |

### 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<br>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 |

### 14.7.1. 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 |
|---|---|
| propylene glycol monomethyl ether - mixture of isomers | Not Available |
| d-limonene | Not Available |
| kerosene | Not Available |
| hydrocarbons, C3-4 rich, petroleum distillate | Not Available |

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

| Product name | Ship Type |
|---|---|
| propylene glycol monomethyl ether - mixture of isomers | Not Available |
| d-limonene | Not Available |
| kerosene | Not Available |
| hydrocarbons, C3-4 rich, petroleum distillate | Not Available |

## SECTION 15 Regulatory information

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

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

| HSR Number | Group Standard |
|---|---|
| HSR002515 | Aerosols Flammable Group Standard 2020 |

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

**propylene glycol monomethyl ether - mixture of isomers 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)

**d-limonene 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)

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

Chemical Footprint Project - Chemicals of High Concern List
International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs
International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs - Group 1: Carcinogenic to humans
International Agency for Research on Cancer (IARC) - Agents Classified by the IARC Monographs - Not Classified as Carcinogenic
New Zealand Approved Hazardous Substances with controls
New Zealand Hazardous Substances and New Organisms (HSNO) Act - Classification of Chemicals
New Zealand Inventory of Chemicals (NZIoC)
New Zealand Workplace Exposure Standards (WES)

**hydrocarbons, C3-4 rich, petroleum distillate is found on the following regulatory lists**

Chemical Footprint Project - Chemicals of High Concern List

New Zealand Inventory of Chemicals (NZIoC)

### Additional Regulatory Information

Not Applicable

### Hazardous Substance Location

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

| Hazard Class | 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 |
|---|---|---|---|---|
| 6.5A or 6.5B | 120 | 1 | 3 | |
| 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 (d-limonene; kerosene; hydrocarbons, C3-4 rich, petroleum distillate) |
| China - IECSC | Yes |
| Europe - EINEC / ELINCS / NLP | Yes |
| Japan - ENCS | No (hydrocarbons, C3-4 rich, petroleum distillate) |
| Korea - KECI | Yes |
| New Zealand - NZIoC | Yes |
| Philippines - PICCS | No (hydrocarbons, C3-4 rich, petroleum distillate) |
| USA - TSCA | All chemical substances in this product have been designated as TSCA Inventory ‘Active' |
| Taiwan - TCSI | Yes |
| Mexico - INSQ | No (hydrocarbons, C3-4 rich, petroleum distillate) |
| Vietnam - NCI | Yes |
| Russia - FBEPH | No (hydrocarbons, C3-4 rich, petroleum distillate) |
| ***Legend:*** | ***Yes = All CAS declared ingredients are on the inventory***<br>***No = One or more of the CAS listed ingredients are not on the inventory. These ingredients may be exempt or will require registration.*** |

## SECTION 16 Other information

| | |
|---|---|
| **Revision Date** | 19/11/2021 |
| **Initial Date** | 19/07/2019 |

### SDS Version Summary

| Version | Date of Update | Sections Updated |
|---|---|---|
| 6.1 | 20/08/2021 | Classification change due to full database hazard calculation/update. |

| Version | Date of Update | Sections Updated |
|---|---|---|
| 7.1 | 19/11/2021 | Hazards identification - Classification, Identification of the substance / mixture and of the company / undertaking - Synonyms, Name |

## 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

- 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