

# CRC (NZ) 3102 Food Grade Contact Cleaner CRC Industries (CRC Industries New Zealand)

CRC Industries (CRC Industries New Zealand)
Chemwatch: 22-6477

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

Chemwatch Hazard Alert Code: 3

Issue Date: **22/05/2024**Print Date: **22/11/2024**S.GHS.NZL.EN

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

#### **Product Identifier**

Version No: 8.1

Product name	CRC (NZ) 3102 Food Grade Contact Cleaner
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	Electronic cleaner.
	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 <sup>[1]</sup>	Aerosols, Hazard Category 1, Skin Corrosion/Irritation Category 2, Specific Target Organ Toxicity - Single Exposure (Narcotic Effects) Category 3, Reproductive Toxicity Category 2, Hazardous to the Aquatic Environment Long-Term Hazard Category 2
Legend:	1. Classified by Chemwatch; 2. Classification drawn from CCID EPA NZ; 3. Classification drawn from Regulation (EU) No 1272/2008 - Annex VI
Determined by Chemwatch using GHS/HSNO criteria	2.1.2A, 6.3A, 6.8B, 6.9B (narcotic effects), 9.1B

#### Label elements

#### Hazard pictogram(s)









Signal word

Danger

#### Hazard statement(s)

H222+H229	Extremely flammable aerosol. Pressurized container: may burst if heated.
H315	Causes skin irritation.
H336	May cause drowsiness or dizziness.
H361	Suspected of damaging fertility or the unborn child.
H411	Toxic to aquatic life with long lasting effects.

#### Precautionary statement(s) Prevention

P201	Obtain special instructions before use.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211	Do not spray on an open flame or other ignition source.
P251	Do not pierce or burn, even after use.

#### Precautionary statement(s) Response

P308+P313	IF exposed or concerned: Get medical advice/ attention.
P312	Call a POISON CENTER/doctor/physician/first aider/if you feel unwell.
P391	Collect spillage.
P302+P352	IF ON SKIN: Wash with plenty of water and soap.

#### Precautionary statement(s) Storage

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

# Precautionary statement(s) Disposal

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

#### **SECTION 3 Composition / information on ingredients**

# Substances

See section below for composition of Mixtures

#### **Mixtures**

CAS No	%[weight]	Name
64742-49-0.	>60	Hydrocarbons, C6, isoalkanes, <5% n-hexane
124-38-9	1-9	<u>carbon dioxide</u>
Not Available		NOTE: Manufacturer has supplied full ingredient
Not Available		information to allow CHEMWATCH assessment.
Legend:	•	h; 2. Classification drawn from CCID EPA NZ; 3. Classification drawn from Regulation (EU) No classification drawn from C&L * EU IOELVs available

#### **SECTION 4 First aid measures**

# Description of first aid measures

**Eye Contact** 

If aerosols come in contact with the eyes:

# ▶ Immediately hold the eyelids apart and flush the eye continuously for at least 15 minutes with fresh running water.

- Ensure complete irrigation of the eye by keeping eyelids apart and away from eye and moving the eyelids by occasionally lifting the upper and lower lids.
- ▶ Transport to hospital or doctor without delay.
- Removal of contact lenses after an eye injury should only be undertaken by skilled personnel.

Skin Contact	If solids or aerosol mists are deposited upon the skin:  Flush skin and hair with running water (and soap if available).  Remove any adhering solids with industrial skin cleansing cream.  DO NOT use solvents.  Seek medical attention in the event of irritation.
Inhalation	If aerosols, fumes or combustion products are inhaled:  Remove to fresh air.  Lay patient down. Keep warm and rested.  Prostheses such as false teeth, which may block airway, should be removed, where possible, prior to initiating first aid procedures.  If breathing is shallow or has stopped, ensure clear airway and apply resuscitation, preferably with a demand valve resuscitator, bag-valve mask device, or pocket mask as trained. Perform CPR if necessary.  Transport to hospital, or doctor.
Ingestion	<ul> <li>Avoid giving milk or oils.</li> <li>Avoid giving alcohol.</li> <li>Not considered a normal route of entry.</li> </ul>

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

Treat symptomatically.

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

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

#### INGESTION

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

[Ellenhorn and Barceloux: Medical Toxicology]

**BIOLOGICAL EXPOSURE INDEX - BEI** 

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

Determinant Index Sampling Time Comments
1. 2,5-hexanedione in urine 5 mg/gm creatinine End of shift NS
2. n-Hexane in end-exhaled air SQ

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

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

#### **SECTION 5 Firefighting measures**

#### **Extinguishing media**

#### SMALL FIRE:

Water spray, dry chemical or CO2

#### LARGE FIRE:

Water spray or fog.

#### Special hazards arising from the substrate or mixture

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

#### Advice for firefighters

Fire Fighting  Alert Fire Brigade and tell them location and nature of hazard.  May be violently or explosively reactive.  Wear breathing apparatus plus protective gloves.  Prevent, by any means available, spillage from entering drains or water course.	
Fire/Explosion Hazard	<ul> <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> <li>Combustion products include:</li> <li>carbon monoxide (CO)</li> <li>carbon dioxide (CO2)</li> <li>other pyrolysis products typical of burning organic material.</li> <li>Contains low boiling substance: Closed containers may rupture due to pressure buildup under fire conditions.</li> <li>May emit clouds of acrid smoke</li> </ul>

#### **SECTION 6 Accidental release measures**

#### Personal precautions, protective equipment and emergency procedures

#### **Environmental precautions**

See section 12

#### Methods and material for containment and cleaning up

Minor Spills	<ul> <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> <li>DO NOT exert excessive pressure on valve; DO NOTattempt to operate damaged valve.</li> <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> <li>Remove leaking cylinders to a safe place if possible.</li> <li>Release pressure under safe, controlled conditions by opening the valve.</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	<ul> <li>DO NOT allow clothing wet with material to stay in contact with skin</li> <li>Avoid all personal 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> <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>DO NOT store in pits, depressions, basements or areas where vapours may be trapped.</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> <li>Aerosol dispenser.</li> <li>Check that containers are clearly labelled.</li> </ul>	
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)	carbon dioxide	Carbon dioxide	5000 ppm / 9000 mg/m3	54000 mg/m3 / 30000 ppm	Not Available	Not Available
Ingredient	Original IDLH		Revised IDLH			
Hydrocarbons, C6, isoalkanes, <5% n-hexane	Not Available		Not Available			
carbon dioxide	40,000 ppm		Not Available			

#### **Occupational Exposure Banding**

Ingredient	Occupational Exposure Band Rating	Occupational Exposure Band Limit	
Hydrocarbons, C6, isoalkanes, <5% n-hexane	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**

Appropriate engineering controls

CARE: 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

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. The basic types of engineering controls are: Process controls which involve changing the way a job activity or process is done to reduce the risk. Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment. Individual protection measures, such as personal protective equipment No special equipment for minor exposure i.e. when handling small quantities. ▶ OTHERWISE: For potentially moderate or heavy exposures: Eye and face protection Safety glasses with side shields. ▶ NOTE: Contact lenses pose a special hazard; soft lenses may absorb irritants and ALL lenses concentrate them. Skin protection See Hand protection below ▶ Neoprene rubber gloves ▶ No special equipment needed when handling small quantities. ▶ OTHERWISE: ▶ For potentially moderate exposures: Hands/feet protection ▶ Wear general protective gloves, eg. light weight rubber gloves. ▶ For potentially heavy exposures: ▶ Wear chemical protective gloves, eg. PVC. and safety footwear. **Body protection** See Other protection below No special equipment needed when handling small quantities. OTHERWISE: Overalls ▶ Skin cleansing cream. Eyewash unit. Other protection ▶ 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. • Avoid dangerous levels of charge by ensuring a low resistivity of the surface material worn outermost. BRETHERICK: Handbook of Reactive Chemical Hazards.

#### Respiratory protection

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

Selection of the Class and Type of respirator will depend upon the level of breathing zone contaminant and the chemical nature of the contaminant. Protection Factors (defined as the ratio of contaminant outside and inside the mask) may also be important.

Required minimum protection factor	Maximum gas/vapour concentration present in air p.p.m. (by volume)	Half-face Respirator	Full-Face Respirator
up to 10	1000	A-AUS / Class1	-
up to 50	1000	-	A-AUS / Class 1
up to 50	5000	Airline *	-
up to 100	5000	-	A-2
up to 100	10000	-	A-3
100+			Airline**

\* - Continuous Flow \*\* - Continuous-flow or positive pressure demand

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.

#### **SECTION 9 Physical and chemical properties**

#### **Appearance**

Colourless flammable liquid with ethereal odour; not miscible with water. Supplied as an aerosol pack. Contents under PRESSURE. Contains carbon dioxide propellant.

Supplied as an aerosol pack. Contents under PRESSURE. Contains highly flammable hydrocarbon propellant.

Physical state	Liquid	Relative density (Water = 1)	0.7
Odour	Not Available	Partition coefficient n- octanol / water	Not Available
Odour threshold	Not Available	Auto-ignition temperature (°C)	264
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)	57-61	Molecular weight (g/mol)	Not Applicable
Flash point (°C)	<-29	Taste	Not Available
Evaporation rate	Not Available	Explosive properties	Not Available
Flammability	HIGHLY FLAMMABLE.	Oxidising properties	Not Available
Upper Explosive Limit (%)	7.0	Surface Tension (dyn/cm or mN/m)	Not Available
Lower Explosive Limit (%)	1.0	Volatile Component (%vol)	100
Vapour pressure (kPa)	Not Available	Gas group	Not Available
Solubility in water	Immiscible	pH as a solution (1%)	Not Applicable
Vapour density (Air = 1)	>1	VOC g/L	Not Available
Heat of Combustion (kJ/g)	Not Available	Ignition Distance (cm)	Not Available
Flame Height (cm)	Not Available	Flame Duration (s)	Not Available
Enclosed Space Ignition Time Equivalent (s/m3)	Not Available	Enclosed Space Ignition Deflagration Density (g/m3)	Not Available

#### **SECTION 10 Stability and reactivity**

Reactivity	See section 7
Chemical stability	<ul> <li>Elevated temperatures.</li> <li>Presence of open flame.</li> <li>Product is considered stable.</li> <li>Hazardous polymerisation will not occur.</li> </ul>
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

#### Inhaled

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

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

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

Inhalation of toxic gases may cause:

- ▶ Central Nervous System effects including depression, headache, confusion, dizziness, stupor, coma and seizures;
- respiratory: acute lung swellings, shortness of breath, wheezing, rapid breathing, other symptoms and respiratory arrest;
- heart: collapse, irregular heartbeats and cardiac arrest;
- gastrointestinal: irritation, ulcers, nausea and vomiting (may be bloody), and abdominal pain.

Inhalation hazard is increased at higher temperatures.

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.

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.

	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.  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 unconsciousness and, finally, convulsions, coma and death.  WARNING:Intentional misuse by concentrating/inhaling contents may be lethal.		
Ingestion	Accidental ingestion of the material may be damaging to the health of the individual.  Not normally a hazard due to physical form of product.  Considered an unlikely route of entry in commercial/industrial environments  Ingestion of petroleum hydrocarbons can irritate the pharynx, oesophagus, stomach and small intestine, and cause swellings and ulcers of the mucous. Symptoms include a burning mouth and throat; larger amounts can cause nausea and vomiting, narcosis, weakness, dizziness, slow and shallow breathing, abdominal swelling, unconsciousness and convulsions.		
Skin Contact	This material can cause inflammation of the skin on contact in some persons.  The material may accentuate any pre-existing dermatitis condition Repeated exposure may cause skin cracking, flaking or drying following normal handling and use.  Skin contact with the material may damage the health of the individual; systemic effects may result following absorption.  Spray mist may produce discomfort  Open cuts, abraded or irritated skin should not be exposed to this material		
Еуе	Limited evidence or practical experience suggests, that the material may cause eye irritation in a substantial number of individuals. Prolonged eye contact may cause inflammation characterised by a temporary redness of the conjunctiva (similar to windburn).  Not considered to be a risk because of the extreme volatility of the gas.  Direct eye contact with petroleum hydrocarbons can be painful, and the corneal epithelium may be temporarily damaged.  Aromatic species can cause irritation and excessive tear secretion.		
Chronic	Harmful: danger of serious damage to health by prolonged exposure through inhalation.  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.  Ample evidence from experiments exists that there is a suspicion this material directly reduces fertility.  There has been some concern that this material can cause cancer or mutations but there is not enough data to make an assessment.  Substance accumulation, in the human body, may occur and may cause some concern following repeated or long-term occupational exposure.  Main route of exposure to the gas in the workplace is by inhalation.  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.  Repeated application of mildly hydrotreated oils (principally paraffinic), to mouse skin, induced skin tumours; no tumours were induced with severely hydrotreated oils.  Chronic solvent inhalation exposures may result in nervous system impairment and liver and blood changes. [PATTYS]		
CRC (NZ) 3102 Food Grade	тохісіту	IRRITATION	
Contact Cleaner	Not Available	Not Available	
	TOXICITY	IRRITATION	
Hydrocarbons, C6,	dermal (rat) LD50: 3.35 mg/kg <sup>[2]</sup>	Not Available	
isoalkanes, <5% n-hexane	Inhalation (Rat) LC50: 0.26 mg/L4h <sup>[2]</sup> Oral (Rat) LD50: 16.75 mg/kg <sup>[2]</sup>		
	TOXICITY	IRRITATION	
carbon dioxide	Not Available	Not Available	

Hydrocarbons, C6,	dermal (rat) LD50: 3.35 mg/kg <sup>123</sup>	Not Available	
isoalkanes, <5% n-hexane	Inhalation (Rat) LC50: 0.26 mg/L4h <sup>[2]</sup>		
	Oral (Rat) LD50: 16.75 mg/kg <sup>[2]</sup>		
	TOXICITY	IRRITATION	
carbon dioxide	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

#### HYDROCARBONS, C6. ISOALKANES. <5% N-**HEXANE**

Most Low Boiling Point Naphthas (LBPNs) have low actute toxicity to oral, dermal and inhalation routes of exposure, and mild to moderate skin and eye irritating effects. However, some heavier 'cracked' LBPNs (LKBPNs with greater olefinic content) have been found to be more irritating to the skin and eyes compared to non-cracked LBPNs.

LBPNs are not known to be sensitising to the skin.

Animal studies examined the effects of short-term and longer-term exposure to LBPNs through inhalation or oral routes. In male rats specifically, exposure to LBPNs resulted in kidney-related issues like increased kidney weight, kidney lesions, and hyaline droplet formation. However, the same effects were not seen in female rats, mice, or humans due to a mechanism of action involving a particular enzyme only found in male rats.

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-

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.

CRC (NZ) 3102 Food Grade Contact Cleaner & HYDROCARBONS, C6, ISOALKANES, <5% N-

**HEXANE** 

No significant acute toxicological data identified in literature search.

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.

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.

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).

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. Prolonged contact with petroleum may result in skin inflammation and make the skin more sensitive to irritation and penetration by other materials.

The material may be irritating to the eye, with prolonged contact causing inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis.

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

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

#### **SECTION 12 Ecological information**

#### **Toxicity**

CRC (NZ) 3102 Food Grade Contact Cleaner	Endpoint Test Duration (hr)		Species	Value	Source
	Not Available Not Available		Not Available	Not Available	Not Available
	Endpoint	Test Duration (hr)	Species	Value	Source
	EC50	96h	Algae or other aquatic plants	64mg/l	2
Hydrocarbons, C6, isoalkanes, <5% n-hexane	NOEC(ECx)	504h	Crustacea	0.17mg/l	2
	LC50	96h	Fish	0.11mg/l	2
	EC50	48h	Crustacea	0.64mg/l	2
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 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, 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.

For carbon dioxide

Environmental Fate: Carbon dioxide in earth's atmosphere is considered a trace gas. There are seasonal fluctuations of atmospheric concentrations of carbon dioxide primarily due to CO2 absorbed during seasonal plant growth. Due to human activities such as the combustion of fossil fuels and deforestation, the concentration of atmospheric carbon dioxide has increased by about 35% since preindustrial times. Carbon dissolved in the oceans is about 50 times greater than CO2 found in the atmosphere.

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.

DO NOT discharge into sewer or waterways.

#### Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
carbon dioxide	LOW	LOW

Ingredient	Bioaccumulation
carbon dioxide	LOW (LogKOW = 0.83)

# Mobility in soil

Ingredient	Mobility
carbon dioxide	HIGH (Log KOC = 1.498)

#### **SECTION 13 Disposal considerations**

#### Waste treatment methods

Legislation addressing waste disposal requirements may differ by country, state and/ or territory. Each user must refer to laws operating in their area. In some areas, certain wastes must be tracked.

A Hierarchy of Controls seems to be common - the user should investigate:

- Reduction
- Reuse
- Recycling
- Disposal (if all else fails)

#### **Product / Packaging** disposal

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	
	2
Marine Pollutant	¥2>
HAZCHEM	Not Applicable

#### Land transport (UN)

14.1. UN numb number	oer or ID	1950			
14.2. UN prope name	er shipping	AEROSOLS			
14.3. Transpor class(es)		Class 2.1 Subsidiary Hazard Not Applicable			
14.4. Packing	group	Not Applicable			
14.5. Environn hazard	nental	Environmentally hazardous			
14.6. Special p	precautions	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	<u> </u>	,			
Aerosois, flammable (engine starting fluid)  14.3. Transport hazard class(es)  ICAO / IATA Subsidiary Hazard Not Applicable  ERG Code 10L  14.4. Packing group Not Applicable  Environmentally hazardous  Environmentally hazardous  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	14.1. UN number	1950			
14.3. Transport hazard class(es)  ICAO / IATA Subsidiary Hazard Not Applicable  ERG Code 10L  14.4. Packing group Not Applicable  Environmentally hazardous  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		Aerosols, flammable (engine starting fluid)			
class(es)  ERG Code  10L  14.4. Packing group  Not Applicable  Environmentally hazardous  Environmentally hazardous  Special provisions  Cargo Only Packing Instructions  Cargo Only Maximum Qty / Pack  Passenger and Cargo Limited Quantity Packing Instructions  Forbidden		ICAO/IATA Class 2.1			
14.4. Packing group  Not Applicable  14.5. Environmental hazard  Environmentally hazardous  Special provisions Cargo Only Packing Instructions Cargo Only Maximum Qty / Pack Passenger and Cargo Packing Instructions Forbidden  Passenger and Cargo Maximum Qty / Pack Passenger and Cargo Maximum Qty / Pack Passenger and Cargo Maximum Qty / Pack Forbidden  Passenger and Cargo Limited Quantity Packing Instructions Forbidden	•	ICAO / IATA Subsidiary Hazard	Not Applicable		
14.5. Environmental hazard  Environmentally hazardous  Special provisions Cargo Only Packing Instructions Cargo Only Maximum Qty / Pack Passenger and Cargo Packing Instructions Forbidden Passenger and Cargo Maximum Qty / Pack Passenger and Cargo Maximum Qty / Pack Passenger and Cargo Maximum Qty / Pack Forbidden Passenger and Cargo Limited Quantity Packing Instructions Forbidden	ciass(es)	ERG Code	10L		
hazard  Environmentally hazardous  Special provisions Cargo Only Packing Instructions Cargo Only Maximum Qty / Pack Passenger and Cargo Packing Instructions Forbidden Passenger and Cargo Maximum Qty / Pack Passenger and Cargo Maximum Qty / Pack Passenger and Cargo Maximum Qty / Pack Forbidden Passenger and Cargo Limited Quantity Packing Instructions Forbidden	14.4. Packing group	Not Applicable			
Cargo Only Packing Instructions  Cargo Only Packing Instructions  Cargo Only Maximum Qty / Pack  Passenger and Cargo Packing Instructions  Forbidden  Passenger and Cargo Maximum Qty / Pack  Passenger and Cargo Limited Quantity Packing Instructions  Forbidden		Environmentally hazardous			
Cargo Only Maximum Qty / Pack  Passenger and Cargo Packing Instructions Forbidden  Passenger and Cargo Maximum Qty / Pack  Passenger and Cargo Limited Quantity Packing Instructions Forbidden		Special provisions		A1 A145 A167 A802	
Passenger and Cargo Packing Instructions Forbidden  Passenger and Cargo Maximum Qty / Pack  Passenger and Cargo Limited Quantity Packing Instructions Forbidden		Cargo Only Packing Instructions	203		
Passenger and Cargo Packing Instructions Forbidden  Passenger and Cargo Maximum Qty / Pack Forbidden  Passenger and Cargo Limited Quantity Packing Instructions Forbidden		Cargo Only Maximum Qty / Pack	150 kg		
Passenger and Cargo Maximum Qty / Pack Forbidden  Passenger and Cargo Limited Quantity Packing Instructions Forbidden	•	Passenger and Cargo Packing Ir	Forbidden		
	101 4301	Passenger and Cargo Maximum	Forbidden		
		Passenger and Cargo Limited Qu	uantity Packing Instructions	Forbidden	
Passenger and Cargo Limited Maximum Qty / Pack Forbidden		Passenger and Cargo Limited Ma	aximum 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 Special provisions Limited Quantities	F-D , S-U 63 190 277 3 1000 ml	27 344 381 959	

# 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
Hydrocarbons, C6, isoalkanes, <5% n-hexane	Not Available
carbon dioxide	Not Available

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

Product name	Ship Type
Hydrocarbons, C6, isoalkanes, <5% n-hexane	Not Available
carbon dioxide	Not Available

# **SECTION 15 Regulatory information**

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

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

HSR Number	Group Standard
HSR002515	Aerosols (Flammable) Group Standard 2017

#### Hydrocarbons, C6, isoalkanes, <5% n-hexane is found on the following regulatory lists

Chemical Footprint Project - Chemicals of High Concern List

New Zealand Inventory of Chemicals (NZIoC)

New Zealand Land Transport Rule; Dangerous Goods 2005 - Schedule 2 Dangerous Goods in Limited Quantities and Consumer Commodities

#### 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**

Notional Inventory	Ctatus		
National Inventory	Status		
Australia - AIIC / Australia Non-Industrial Use	Yes		
Canada - DSL	Yes		
Canada - NDSL No (Hydrocarbons, C6, isoalkanes, <5% n-hexane; carbon dioxide)			
China - IECSC Yes			
Europe - EINEC / ELINCS / NLP	Yes		
Japan - ENCS	No (Hydrocarbons, C6, isoalkanes, <5% n-hexane)		
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		
Legend:	Yes = All CAS declared ingredients are on the inventory No = One or more of the CAS listed ingredients are not on the inventory. These ingredients may be exempt or will require registration.		

Revision Date	22/05/2024
Initial Date	01/11/2009

#### **SDS Version Summary**

Version	Date of Update	Sections Updated
7.1	10/12/2021	Classification change due to full database hazard calculation/update.
8.1	22/05/2024	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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