



Shell Air Conditioning Refresher (Aerosol)

Recochem Inc. (PFX GROUP)

Chemwatch: 5327-65

Version No: 3.2

Safety Data Sheet according to WHMIS 2023 requirements

Initial Date: 09/12/2019

Revision Date: 06/05/2026

Print Date: 18/05/2026

S.GHS.CAN.EN.E

SECTION 1 Identification

Product Identifier

Product name	Shell Air Conditioning Refresher (Aerosol)
Chemical Name	Not Applicable
Synonyms	Product code: 71230-100SCC
Proper shipping name	AEROSOLS, FLAMMABLE
Chemical formula	Not Applicable
Other means of identification	Not Available

Recommended use of the chemical and restrictions on use

Relevant identified uses	Cleaning Solvent. Application is by spray atomisation from a hand held aerosol pack Use according to manufacturer's directions.
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Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party

Registered company name	Recochem Inc. (PFX GROUP)
Address	850 Montée de Liesse Saint-Laurent QC H4T 1P4 Canada
Telephone	514-341-3550
Fax	Not Available
Website	www.recochem.com
Email	TPerks@recochem.com

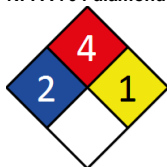
Emergency phone number

Association / Organisation	CANUTEC	CHEMWATCH EMERGENCY RESPONSE (24/7)
Emergency telephone number(s)	613-996-6666 (24/7 365)	+1 867 670 2867 (ID#: 5327-65)
Other emergency telephone number(s)	Not Available	+61 3 9573 3188

SECTION 2 Hazard(s) identification

Classification of the substance or mixture

NFPA 704 diamond



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



Canadian WHMIS Symbols



Classification	Aerosols, Hazard Category 1, Serious Eye Damage/Eye Irritation Category 2A, Simple Asphyxiant
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Label elements

Shell Air Conditioning Refresher (Aerosol)

Hazard pictogram(s)	 
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Signal word	Danger
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Hazard statement(s)

H222+H229	Extremely flammable aerosol. Pressurized container: may burst if heated.
H319	Causes serious eye irritation.
	May displace oxygen and cause rapid suffocation

Physical and Health hazard(s) not otherwise classified

Not Applicable

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.
P264	Wash all exposed external body areas thoroughly after handling.

Precautionary statement(s) Response

P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313	If eye irritation persists: Get medical advice/attention.

Precautionary statement(s) Storage

P410+P412	Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.
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Precautionary statement(s) Disposal

Not Applicable

No further product hazard information.

SECTION 3 Composition / information on ingredients

Substances

See section below for composition of Mixtures

Mixtures

CAS No	%[weight]	Name
74-98-6	10-20	propane
64-17-5	<10	ethanol
112-34-5	<5	diethylene glycol monobutyl ether
Not Available	1-3	anionic surfactants.
Not Available	<3	non-ionic surfactants.
Not Available	<1	fragrance.

The specific chemical identity and/or exact percentage (concentration) of composition has been withheld as a trade secret.

SECTION 4 First-aid measures

Description of first aid measures

Eye Contact	<p>If aerosols come in contact with the eyes:</p> <ul style="list-style-type: none"> ▶ 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	<p>If solids or aerosol mists are deposited upon the skin:</p> <ul style="list-style-type: none"> ▶ 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	<p>If aerosols, fumes or combustion products are inhaled:</p> <ul style="list-style-type: none"> ▶ 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	Not considered a normal route of entry.

Continued...

Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5 Fire-fighting 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**

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

Special protective equipment and precautions for fire-fighters

Fire Fighting	<ul style="list-style-type: none"> ▶ Alert Fire Brigade and tell them location and nature of hazard. ▶ May be violently or explosively reactive. ▶ Wear breathing apparatus plus protective gloves. ▶ Prevent, by any means available, spillage from entering drains or water course. ▶ If safe, switch off electrical equipment until vapour fire hazard removed. ▶ Use water delivered as a fine spray to control fire and cool adjacent area. ▶ DO NOT approach containers suspected to be hot.
Fire/Explosion Hazard	<ul style="list-style-type: none"> ▶ Liquid and vapour are highly flammable. ▶ Severe fire hazard when exposed to heat or flame. ▶ Vapour forms an explosive mixture with air. ▶ Severe explosion hazard, in the form of vapour, when exposed to flame or spark. ▶ Vapour may travel a considerable distance to source of ignition. ▶ Heating may cause expansion or decomposition with violent container rupture. ▶ Aerosol cans may explode on exposure to naked flames. <p>Combustion products include:</p> <ul style="list-style-type: none"> ▶ carbon monoxide (CO) ▶ carbon dioxide (CO2) ▶ other pyrolysis products typical of burning organic material.

SECTION 6 Accidental release measures**Personal precautions, protective equipment and emergency procedures**

See section 8

Environmental precautions

See section 12

Methods and material for containment and cleaning up

Minor Spills	<ul style="list-style-type: none"> ▶ Clean up all spills immediately. ▶ Avoid breathing vapours and contact with skin and eyes. ▶ Wear protective clothing, impervious gloves and safety glasses. ▶ Shut off all possible sources of ignition and increase ventilation. ▶ Wipe up. ▶ If safe, damaged cans should be placed in a container outdoors, away from all ignition sources, until pressure has dissipated. ▶ Undamaged cans should be gathered and stowed safely.
Major Spills	<ul style="list-style-type: none"> ▶ Clear area of personnel and move upwind. ▶ 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 courses ▶ No smoking, naked lights or ignition sources. ▶ Increase ventilation. ▶ Stop leak if safe to do so.

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

SECTION 7 Handling and storage**Precautions for safe handling**

Safe handling	<ul style="list-style-type: none"> ▶ Avoid skin contact, including inhalation. ▶ Wear protective clothing when risk of exposure occurs. ▶ Use in a well-ventilated area. ▶ Prevent concentration in hollows and sumps. ▶ DO NOT enter confined spaces until atmosphere has been checked. ▶ Avoid smoking, naked lights or ignition sources. ▶ Avoid contact with incompatible materials.
Other information	<ul style="list-style-type: none"> ▶ Keep dry to avoid corrosion of cans. Corrosion may result in container perforation and internal pressure may eject contents of can

Conditions for safe storage, including any incompatibilities

Suitable container	<ul style="list-style-type: none"> ▶ Aerosol dispenser. ▶ Check that containers are clearly labelled.
Storage incompatibility	<ul style="list-style-type: none"> ▶ Compressed gases may contain a large amount of kinetic energy over and above that potentially available from the energy of reaction produced by the gas in chemical reaction with other substances ▶ 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
Canada - Yukon Permissible Concentrations for Airborne Contaminant Substances	propane	Propane	Not Available	Not Available	Not Available	(See Table 12)
Canada - Saskatchewan Occupational Health and Safety Regulations - Contamination Limits	propane	Propane	Not Available	Not Available	Not Available	Not Available
Canada - Manitoba Occupational Exposure Limits	propane	Not Available	Not Available	Not Available	Not Available	TLV® Basis: Asphyxia; See Appendix F: Minimal Oxygen Content
Canada - Prince Edward Island Occupational Exposure Limits	propane	Propane	Not Available	Not Available	Not Available	Not Available
Canada - British Columbia Occupational Exposure Limits	propane	Aliphatic hydrocarbon gases [C1-C4]	1000 ppm	Not Available	Not Available	Not Available
Canada - Alberta Occupational Exposure Limits	propane	Propane	1000 ppm	Not Available	Not Available	Not Available
Canada - Northwest Territories Occupational Exposure Limits	propane	Aliphatic hydrocarbon gases, Alkane [C1-C4]	1000 ppm	1250 ppm	Not Available	Not Available
Canada - Quebec Permissible Exposure Values for Airborne Contaminants	propane	Propane	1000 ppm / 1800 mg/m3	Not Available	Not Available	Not Available
Canada - Nova Scotia Occupational Exposure Limits Canada	propane	Propane	1000 ppm	Not Available	Not Available	TLV Basis: cardiac sensitization; central nervous system impairment
Canada - British Columbia Occupational Exposure Limits (French Canadian)	propane	Gaz d'hydrocarbures aliphatiques [C1-C4]	1000 ppm	Not Available	Not Available	Not Available
Canada - Alberta Occupational Exposure Limits (French Canadian)	propane	Propane	1000 ppm	Not Available	Not Available	Not Available
Canada - Manitoba Occupational Exposure Limits (French Canadian)	propane	Propane	Not Available	Not Available	Not Available	Base TLV® : asphyxie ; voir Annexe F : teneur minimale en oxygène
Canada - Nova Scotia Occupational Exposure Limits Canada (French Canadian)	propane	Propane	1000 ppm	Not Available	Not Available	Base TLV® : sensibilisation cardiaque ; atteinte du système nerveux central
Canada - Saskatchewan Occupational Health and Safety Regulations - Contamination Limits (French Canadian)	propane	Propane	Not Available	Not Available	Not Available	Not Available
Canada - Yukon Permissible Concentrations for Airborne Contaminant Substances (French Canadian)	propane	Propane	Not Available	Not Available	Not Available	(Voir le tableau 12)
Canada - Prince Edward Island Occupational Exposure Limits (French Canadian)	propane	Propane	Not Available	Not Available	Not Available	Not Available
Canada - Yukon Permissible Concentrations for Airborne Contaminant Substances	ethanol	Ethyl alcohol (Ethanol)	1,000 ppm / 1,900 mg/m3	1,900 mg/m3 / 1,000 ppm	Not Available	Not Available
Canada - Saskatchewan Occupational Health and Safety Regulations - Contamination Limits	ethanol	Ethanol	1000 ppm	1250 ppm	Not Available	Not Available
Canada - Manitoba Occupational Exposure Limits	ethanol	Not Available	Not Available	1000 ppm	Not Available	TLV® Basis: URT irr
Canada - Prince Edward Island Occupational Exposure Limits	ethanol	Ethanol	Not Available	1000 ppm	Not Available	A3
Canada - British Columbia Occupational Exposure Limits	ethanol	Ethanol	Not Available	1000 ppm	Not Available	Not Available
Canada - Alberta Occupational Exposure Limits	ethanol	Ethanol (Ethyl alcohol)	1000 ppm / 1880 mg/m3	Not Available	Not Available	Not Available
Canada - Alberta Occupational Exposure Limits	ethanol	Ethyl alcohol (Ethanol)	1000 ppm / 1880 mg/m3	Not Available	Not Available	Not Available
Canada - Northwest Territories Occupational Exposure Limits	ethanol	Ethanol	1000 ppm	1250 ppm	Not Available	Not Available
Canada - Quebec Permissible Exposure Values for Airborne Contaminants	ethanol	Ethyl alcohol	Not Available	1000 ppm	Not Available	C3: carcinogenic effect detected in animals

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Source	Ingredient	Material name	TWA	STEL	Peak	Notes
Canada - Nova Scotia Occupational Exposure Limits Canada	ethanol	Ethanol	Not Available	1000 ppm	Not Available	TLV Basis: upper respiratory tract irritation
Canada - British Columbia Occupational Exposure Limits (French Canadian)	ethanol	Éthanol	Not Available	1000 ppm	Not Available	Not Available
Canada - Alberta Occupational Exposure Limits (French Canadian)	ethanol	Éthanol (alcool éthylique)	1000 ppm / 1880 mg/m3	Not Available	Not Available	Not Available
Canada - Alberta Occupational Exposure Limits (French Canadian)	ethanol	Alcool éthylique (éthanol)	1000 ppm / 1880 mg/m3	Not Available	Not Available	Not Available
Canada - Manitoba Occupational Exposure Limits (French Canadian)	ethanol	Éthanol	Not Available	1000 ppm	Not Available	Base TLV® : irritation des VRS sup
Canada - Nova Scotia Occupational Exposure Limits Canada (French Canadian)	ethanol	Éthanol	Not Available	1000 ppm	Not Available	Base TLV® : irritation des voies respiratoires supérieures
Canada - Saskatchewan Occupational Health and Safety Regulations - Contamination Limits (French Canadian)	ethanol	Éthanol	1000 ppm	1250 ppm	Not Available	Not Available
Canada - Yukon Permissible Concentrations for Airborne Contaminant Substances (French Canadian)	ethanol	Alcool éthylique (éthanol)	1,000 ppm / 1,900 mg/m3	1,900 mg/m3 / 1,000 ppm	Not Available	Not Available
Canada - Prince Edward Island Occupational Exposure Limits (French Canadian)	ethanol	Éthanol	Not Available	1000 ppm	Not Available	A3
Canada - Manitoba Occupational Exposure Limits	diethylene glycol monobutyl ether	Not Available	10 ppm	Not Available	Not Available	TLV® Basis: Hematologic, liver & kidney eff
Canada - Prince Edward Island Occupational Exposure Limits	diethylene glycol monobutyl ether	Diethylene glycol monobutyl ether (Inhalable fraction and vapor)	10 ppm	Not Available	Not Available	Not Available
Canada - British Columbia Occupational Exposure Limits	diethylene glycol monobutyl ether	Diethylene glycol monobutyl ether	Not Available	Not Available	Not Available	No British Columbia exposure limit at this time.
Canada - British Columbia Occupational Exposure Limits (French Canadian)	diethylene glycol monobutyl ether	Monobutyl éther de diéthylène glycol	Not Available	Not Available	Not Available	Aucune limite d'exposition en Colombie-Britannique pour le moment.
Canada - Manitoba Occupational Exposure Limits (French Canadian)	diethylene glycol monobutyl ether	Éther monobutylique du diéthylène glycol	10 ppm	Not Available	Not Available	Base TLV® : effets hématologiques, hépatiques et rénaux
Canada - Prince Edward Island Occupational Exposure Limits (French Canadian)	diethylene glycol monobutyl ether	Éther monobutylique de diéthylène glycol (fraction inhalable et vapeur)	10 ppm	Not Available	Not Available	Not Available

Exposure controls

Appropriate engineering controls	<p>Engineering controls are used to remove a hazard or place a barrier between the worker and the hazard. Well-designed engineering controls can be highly effective in protecting workers and will typically be independent of worker interactions to provide this high level of protection. The basic types of engineering controls are:</p> <p>Process controls which involve changing the way a job activity or process is done to reduce the risk.</p> <p>Enclosure and/or isolation of emission source which keeps a selected hazard "physically" away from the worker and ventilation that strategically "adds" and "removes" air in the work environment. Ventilation can remove or dilute an air contaminant if designed properly. The design of a ventilation system must match the particular process and chemical or contaminant in use.</p> <p>Employers may need to use multiple types of controls to prevent employee overexposure.</p>
Individual protection measures, such as personal protective equipment	
Eye and face protection	<ul style="list-style-type: none"> ▶ Safety glasses with side shields. ▶ Chemical goggles. [AS/NZS 1337.1, EN166 or national equivalent] ▶ Contact lenses may pose a special hazard; soft contact lenses may absorb and concentrate irritants. A written policy document, describing the wearing of lenses or restrictions on use, should be created for each workplace or task. This should include a review of lens absorption and adsorption for the class of chemicals in use and an account of injury experience. Medical and first-aid personnel should be trained in their removal and suitable equipment should be readily available. In the event of chemical exposure, begin eye irrigation immediately and remove contact lens as soon as practicable.
Skin protection	See Hand protection below
Hands/feet protection	<ul style="list-style-type: none"> ▶ No special equipment needed when handling small quantities. ▶ OTHERWISE: ▶ For potentially moderate exposures: ▶ Wear general protective gloves, eg. light weight rubber gloves. ▶ For potentially heavy exposures: ▶ Wear chemical protective gloves, eg. PVC. and safety footwear.

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Body protection	See Other protection below
Other protection	No special equipment needed when handling small quantities. OTHERWISE: <ul style="list-style-type: none"> ▶ Overalls. ▶ Skin cleansing cream. ▶ Eyewash unit. ▶ Do not spray on hot surfaces.

Respiratory protection

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

- ▶ 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

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

SECTION 9 Physical and chemical properties**Information on basic physical and chemical properties**

Appearance/Colour	Colourless aerosol liquid with paraffinic sweet odour; not miscible with water. Colourless		
Physical state	Compressed Gas	Relative density (Water = 1)	Not Available
Odour	Sweet	Partition coefficient n-octanol / water	Not Available
Odour threshold	Not Available	Auto-ignition temperature (°C)	Not Available
pH (as supplied)	Not Applicable	Decomposition temperature (°C)	Not Available
Melting point / freezing point (°C)	Not Available	Viscosity (cSt)	Not Available
Initial boiling point and boiling range (°C)	Not Available	Molecular weight (g/mol)	Not Applicable
Flash point (°C)	-104 (propane)	Taste	Not Available
Evaporation rate	Not Available	Explosive properties	Not Available
Flammability	HIGHLY FLAMMABLE.	Oxidising properties	Not Available
Upper Explosive Limit (%)	9.5	Surface Tension (dyn/cm or mN/m)	Not Available
Lower Explosive Limit (%)	1	Volatile Component (%vol)	Not Available
Vapour pressure (kPa)	275	Gas group	Not Available
Solubility in water	Immiscible	pH as a solution (1%)	Not Available
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
Particle Characteristics	Not Available		

SECTION 10 Stability and reactivity

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

SECTION 11 Toxicological information**Information on toxicological effects**

a) Acute Toxicity	Based on available data, the classification criteria are not met.
b) Skin Irritation/Corrosion	Based on available data, the classification criteria are not met.
c) Serious Eye Damage/Irritation	There is sufficient evidence to classify this material as eye damaging or irritating
d) Respiratory or Skin sensitisation	Based on available data, the classification criteria are not met.

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e) Mutagenicity	Based on available data, the classification criteria are not met.
f) Carcinogenicity	Based on available data, the classification criteria are not met.
g) Reproductivity	Based on available data, the classification criteria are not met.
h) STOT - Single Exposure	Based on available data, the classification criteria are not met.
i) STOT - Repeated Exposure	Based on available data, the classification criteria are not met.
j) Aspiration Hazard	Based on available data, the classification criteria are not met.

Inhaled	Animal testing shows that the most common signs of inhalation overdose is inco-ordination and drowsiness. The vapour is discomforting WARNING: Intentional misuse by concentrating/inhaling contents may be lethal. 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.
Ingestion	Not normally a hazard due to physical form of product. Considered an unlikely route of entry in commercial/industrial environments
Skin Contact	Spray mist may produce discomfort Open cuts, abraded or irritated skin should not be exposed to this material Entry into the blood-stream, through, for example, cuts, abrasions or lesions, may produce systemic injury with harmful effects. Examine the skin prior to the use of the material and ensure that any external damage is suitably protected.
Eye	This material causes serious eye irritation. Not considered to be a risk because of the extreme volatility of the gas.
Chronic	Prolonged exposure to ethanol may cause damage to the liver and cause scarring. It may also worsen damage caused by other agents. Main route of exposure to the gas in the workplace is by inhalation. WARNING: Aerosol containers may present pressure related hazards.

Shell Air Conditioning Refresher (Aerosol)	TOXICITY	IRRITATION
	Not Available	Not Available
propane	TOXICITY	IRRITATION
	Inhalation (Rat) LC50: 364726.819 ppm4h ^[2]	Not Available
ethanol	TOXICITY	IRRITATION
	Dermal (rabbit) LD50: 17100 mg/kg ^[1]	Eye (Rodent - rabbit): 0.1mL
	Inhalation (Rat) LC50: 64000 ppm4h ^[2]	Eye (Rodent - rabbit): 100mg/4S - Moderate
	Oral (Rat) LD50: 7060 mg/kg ^[2]	Eye (Rodent - rabbit): 100uL - Moderate
		Eye (Rodent - rabbit): 500mg - Severe
		Eye (Rodent - rabbit): 500mg/24H - Mild
		Eye (Rodent - rabbit): 50pph/1H - Mild
		Eye: adverse effect observed (irritating) ^[1]
		Eye: no adverse effect observed (not irritating) ^[1]
		Skin (Human): 70%/2D
diethylene glycol monobutyl ether	TOXICITY	IRRITATION
	Dermal (rabbit) LD50: 4120 mg/kg ^[2]	Eye (Rodent - rabbit): 20mg - Severe
	Oral (Rat) LD50: 5660 mg/kg ^[2]	Eye (Rodent - rabbit): 20mg/24H - Moderate
		Eye: adverse effect observed (irritating) ^[1]
		Skin: no adverse effect observed (not irritating) ^[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

PROPANE	No significant acute toxicological data identified in literature search.
ETHANOL	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.
DIETHYLENE GLYCOL MONOBUTYL ETHER	The material may produce severe irritation to the eye causing pronounced inflammation. Repeated or prolonged exposure to irritants may produce conjunctivitis. This category includes diethylene glycol ethyl ether (DGEE), diethylene glycol propyl ether (DGPE) diethylene glycol butyl ether (DGBE) and diethylene glycol hexyl ether (DGHE) and their acetates. Studies show that they can cause kidney and liver damage, skin and eye irritation as well as blood changes but do not cause damage to the reproductive, genetic and developmental abnormalities, sensitisation or respiratory systems. However, DGEE is reported to cause sperm insufficiency.

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

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Mutagenicity X

Aspiration Hazard X

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

SECTION 12 Ecological information

Toxicity

Shell Air Conditioning Refresher (Aerosol)	Endpoint	Test Duration (hr)	Species	Value	Source
	Not Available	Not Available	Not Available	Not Available	Not Available
propane	Endpoint	Test Duration (hr)	Species	Value	Source
	Not Available	Not Available	Not Available	Not Available	Not Available
ethanol	Endpoint	Test Duration (hr)	Species	Value	Source
	EC50	72h	Algae or other aquatic plants	275mg/l	2
	EC50	48h	Crustacea	2mg/L	4
	EC50	96h	Algae or other aquatic plants	<0.001mg/L	4
	EC50(ECx)	96h	Algae or other aquatic plants	<0.001mg/L	4
LC50	96h	Fish	42mg/L	4	
diethylene glycol monobutyl ether	Endpoint	Test Duration (hr)	Species	Value	Source
	EC50	72h	Algae or other aquatic plants	1101mg/l	2
	EC50	48h	Crustacea	>100mg/l	1
	NOEC(ECx)	96h	Algae or other aquatic plants	>=100mg/l	1
	EC50	96h	Algae or other aquatic plants	>100mg/l	1
LC50	96h	Fish	1300mg/l	2	
Legend:	Extracted from 1. IUCLID Toxicity Data 2. Europe ECHA Registered Substances - Ecotoxicological Information - Aquatic Toxicity 3. US EPA, Ecotox database - Aquatic Toxicity Data 4. ECETOC Aquatic Hazard Assessment Data 5. NITE (Japan) - Bioconcentration Data 6. METI (Japan) - Bioconcentration Data 7. Vendor Data				

DO NOT discharge into sewer or waterways.

Persistence and degradability

Ingredient	Persistence: Water/Soil	Persistence: Air
propane	LOW	LOW
ethanol	LOW (Half-life = 2.17 days)	LOW (Half-life = 5.08 days)
diethylene glycol monobutyl ether	LOW	LOW

Bioaccumulative potential

Ingredient	Bioaccumulation
propane	LOW (LogKOW = 2.36)
ethanol	LOW (LogKOW = -0.31)
diethylene glycol monobutyl ether	LOW (BCF = 0.46)

Mobility in soil

Ingredient	Mobility
propane	LOW (Log KOC = 23.74)
ethanol	HIGH (Log KOC = 1)
diethylene glycol monobutyl ether	LOW (Log KOC = 10)

SECTION 13 Disposal considerations

Waste treatment methods


Product / Packaging disposal	<ul style="list-style-type: none"> ▶ Consult State Land Waste Management Authority for disposal. ▶ Discharge contents of damaged aerosol cans at an approved site. ▶ Allow small quantities to evaporate. ▶ DO NOT incinerate or puncture aerosol cans. ▶ Bury residues and emptied aerosol cans at an approved site.
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SECTION 14 Transport information

Labels Required

Continued...

Shell Air Conditioning Refresher (Aerosol)

	
Marine Pollutant	NO

Land transport (TDG)

14.1. UN number or ID number	1950	
14.2. UN proper shipping name	AEROSOLS, FLAMMABLE	
14.3. Transport hazard class(es)	Class	2.1
	Subsidiary Hazard	Not Applicable
14.4. Packing group	Not Applicable	
14.5. Environmental hazard	Not Applicable	
14.6. Special precautions for user	Special provisions	80, 107
	Explosive Limit and Limited Quantity Index	1 L
	ERAP Index	Not Applicable

Air transport (ICAO-IATA / DGR)

14.1. UN number	1950	
14.2. UN proper shipping name	Aerosols, flammable (engine starting fluid)	
14.3. Transport hazard class(es)	ICAO/IATA Class	2.1
	ICAO / IATA Subsidiary Hazard	Not Applicable
	ERG Code	10L
14.4. Packing group	Not Applicable	
14.5. Environmental hazard	Not Applicable	
14.6. Special precautions for user	Special provisions	A1 A145 A167 A802
	Cargo Only Packing Instructions	203
	Cargo Only Maximum Qty / Pack	150 kg
	Passenger and Cargo Packing Instructions	Forbidden
	Passenger and Cargo Maximum Qty / Pack	Forbidden
	Passenger and Cargo Limited Quantity Packing Instructions	Forbidden
	Passenger and Cargo Limited Maximum Qty / Pack	Forbidden

Sea transport (IMDG-Code / GGVSee)

14.1. UN number	1950	
14.2. UN proper shipping name	AEROSOLS	
14.3. Transport hazard class(es)	IMDG Class	2.1
	IMDG Subsidiary Hazard	Not Applicable
14.4. Packing group	Not Applicable	
14.5. Environmental hazard	Not Applicable	
14.6. Special precautions for user	EMS Number	F-D, S-U
	Special provisions	63 190 277 327 344 381 959
	Limited Quantities	1000 ml

14.7. Maritime transport in bulk according to IMO instruments**14.7.1. Transport in bulk according to Annex II of MARPOL and the IBC code**

Not Applicable

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

Product name	Group
propane	Not Applicable
ethanol	Not Applicable
diethylene glycol monobutyl ether	Not Applicable

14.7.3. Transport in bulk in accordance with the IGC Code

Continued...

Shell Air Conditioning Refresher (Aerosol)

Product name	Ship Type
propane	Not Applicable
ethanol	Not Applicable
diethylene glycol monobutyl ether	Not Applicable

SECTION 15 Regulatory information

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

This product has been classified in accordance with the hazard criteria of the Hazardous Products Regulations and the SDS contains all the information required by the Hazardous Products Regulations.

propane is found on the following regulatory lists

Canada Categorization decisions for all DSL substances

Canada Domestic Substances List (DSL)

Canada Toxicological Index Service - Workplace Hazardous Materials Information System - WHMIS GHS

ethanol is found on the following regulatory lists

Canada Categorization decisions for all DSL substances

Canada Domestic Substances List (DSL)

Canada Toxicological Index Service - Workplace Hazardous Materials Information System - WHMIS GHS

diethylene glycol monobutyl ether is found on the following regulatory lists

Canada Categorization decisions for all DSL substances

Canada Domestic Substances List (DSL)

Canada Toxicological Index Service - Workplace Hazardous Materials Information System - WHMIS GHS

Additional Regulatory Information

Not Applicable

National Inventory Status

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

SECTION 16 Other information

Revision Date	06/05/2026
Initial Date	09/12/2019

SDS Version Summary

Version	Date of Update	Sections Updated
3.1	10/03/2023	Classification change due to full database hazard calculation/update.
3.2	06/05/2026	Hazards identification - Classification, Identification of the substance / mixture and of the company / undertaking - Supplier Information

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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