



# SAFETY DATA SHEET

## 1. Identification

**Product identifier** Contact Cleaner 2000™

**Other means of identification**

**Product code** No. 72140 (Item# 1006133)

**Recommended use** Precision electronics cleaner

**Recommended restrictions** None known.

**Manufacturer/Importer/Supplier/Distributor information**

**Manufactured or sold by:**

**Company name** CRC Canada Co.

**Address** 2-1246 Lorimar Drive  
Mississauga, Ontario L5S 1R2  
Canada

**Telephone**

**General Information** 905-670-2291

**24-Hour Emergency (CHEMTREC)** 800-424-9300 (Canada)  
703-527-3887 (International)

**Website** www.crc-canada.ca

**E-mail** Support.CA@crcindustries.com

## 2. Hazard(s) identification

**Physical hazards** Flammable aerosols Category 2  
Gases under pressure Compressed gas  
Simple asphyxiants Category 1

**Health hazards** Acute toxicity, oral Category 4  
Skin corrosion/irritation Category 2  
Serious eye damage/eye irritation Category 2  
Specific target organ toxicity, single exposure Category 3 narcotic effects  
Aspiration hazard Category 1

**Environmental hazards** Not classified.

### Label elements



**Signal word** Danger

**Hazard statement** Flammable aerosol. Contains gas under pressure; may explode if heated. May displace oxygen and cause rapid suffocation. Harmful if swallowed. May be fatal if swallowed and enters airways. Causes skin irritation. Causes serious eye irritation. May cause drowsiness or dizziness.

**Precautionary statement**

**Prevention** Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking. Do not spray on an open flame or other ignition source. Do not pierce or burn, even after use. Do not eat, drink or smoke when using this product. Avoid breathing mist or vapor. Use only outdoors or in a well-ventilated area. Wear eye protection/face protection. Wear protective gloves. Wash thoroughly after handling.

**Response** IF SWALLOWED: Immediately call a POISON CENTER/doctor. Do NOT induce vomiting. Rinse mouth. IF ON SKIN: Wash with plenty of water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash it before reuse. IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/doctor if you feel unwell. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.

**Storage** Store in a well-ventilated place. Keep container tightly closed. Store locked up. Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.

**Disposal** Dispose of contents/container in accordance with local/regional/national/international regulations.

**Other hazards** None known.

#### Supplemental information

When exposed to extreme heat or hot surfaces, vapors may decompose to harmful or fatal corrosive gases such as hydrogen fluoride, hydrogen chloride and possibly phosgene.

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### 3. Composition/information on ingredients

#### Mixtures

Chemical name	Common name and synonyms	CAS number	%
trans-1,2-dichloroethylene		156-60-5	45 - 70
1,1,1,3,3-pentafluorobutane	HFC-365mfc	406-58-6	15 - 40
decafluoropentane	HFC 43-10mee	138495-42-8	7 - 13
carbon dioxide		124-38-9	3 - 7
isopropyl alcohol		67-63-0	0.5 - 1.5
methanol		67-56-1	0.1 - 1

The exact percentage (concentration) of composition has been withheld as a trade secret.

All concentrations are in percent by weight unless ingredient is a gas. Gas concentrations are in percent by volume.

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### 4. First-aid measures

**Inhalation** Remove from further exposure. For those providing assistance, avoid exposure to yourself or others. Use adequate respiratory protection. If respiratory tract irritation, dizziness, nausea, or unconsciousness occurs, seek immediate medical assistance. If breathing has stopped, assist ventilation with a mechanical device or use mouth-to-mouth resuscitation. Get medical attention immediately. Do NOT give epinephrine (adrenaline).

**Skin contact** Remove contaminated clothing. Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.

**Eye contact** Immediately flush eyes with plenty of water for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical attention if irritation develops and persists.

**Ingestion** Call a physician or poison control center immediately. Immediately give 2 glasses of water. Never give anything by mouth to a victim who is unconscious or is having convulsions. Do NOT give stimulants. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

**Most important symptoms/effects, acute and delayed** Aspiration may cause pulmonary edema and pneumonitis. Vapors have a narcotic effect and may cause headache, fatigue, dizziness and nausea. Very high exposure can cause suffocation from lack of oxygen. Symptoms may include loss of mobility/consciousness. Victim may not be aware of asphyxiation. Asphyxiation may bring about unconsciousness without warning and so rapidly that victim may be unable to protect themselves. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain.

**Indication of immediate medical attention and special treatment needed** Provide general supportive measures and treat symptomatically. Keep victim warm. Keep victim under observation. Symptoms may be delayed.

Because of possible disturbances of cardiac rhythm, catecholamine drugs such as adrenaline should be used with special caution and only in situations of emergency life support.

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### 5. Fire-fighting measures

**Suitable extinguishing media** Water fog. Foam. Dry chemical powder. Carbon dioxide (CO<sub>2</sub>). Use fire-extinguishing media appropriate for surrounding materials.

**Unsuitable extinguishing media** Do not use water jet as an extinguisher, as this will spread the fire.

**Specific hazards arising from the chemical** Contents under pressure. Pressurized container may rupture when exposed to heat or flame. During fire, gases hazardous to health may be formed. When exposed to extreme heat or hot surfaces, vapors may decompose to harmful or fatal corrosive gases such as hydrogen fluoride, hydrogen chloride and possibly phosgene.

**Special protective equipment and precautions for firefighters** Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.

**Fire fighting equipment/instructions** In case of fire: Stop leak if safe to do so. Move containers from fire area if you can do so without risk. Containers should be cooled with water to prevent vapor pressure build up.

<b>Specific methods</b>	Use standard firefighting procedures and consider the hazards of other involved materials. In the event of fire and/or explosion do not breathe fumes.
<b>General fire hazards</b>	Flammable aerosol. Contents under pressure. Pressurized container may rupture when exposed to heat or flame.

## 6. Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures</b>	In the event of a leak evacuate all personnel until ventilation can restore oxygen concentrations to safe levels. Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Many gases are heavier than air and will spread along ground and collect in low or confined areas (sewers, basements, tanks). Wear appropriate protective equipment and clothing during clean-up. Avoid breathing mist or vapor. Emergency personnel need self-contained breathing equipment. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.
<b>Methods and materials for containment and cleaning up</b>	Stop leak if you can do so without risk. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. This product is miscible in water. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water.  Small Spills: Wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination. For waste disposal, see section 13 of the SDS.
<b>Environmental precautions</b>	Avoid discharge into drains, water courses or onto the ground.

## 7. Handling and storage

<b>Precautions for safe handling</b>	Pressurized container: Do not pierce or burn, even after use. Do not use if spray button is missing or defective. Do not spray on a naked flame or any other incandescent material. Do not smoke while using or until sprayed surface is thoroughly dry. Do not cut, weld, solder, drill, grind, or expose containers to heat, flame, sparks, or other sources of ignition. Do not taste or swallow. Avoid breathing mist or vapor. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. When using, do not eat, drink or smoke. Do not enter storage areas or confined spaces unless adequately ventilated. Use only outdoors or in a well-ventilated area. Oxygen concentration should not fall below 19.5 % at sea level (pO <sub>2</sub> = 135 mmHg). Mechanical ventilation or local exhaust ventilation may be required. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Observe good industrial hygiene practices.
<b>Conditions for safe storage, including any incompatibilities</b>	Level 1 Aerosol.  Pressurized container. Protect from sunlight and do not expose to temperatures exceeding 50°C/122 °F. Do not puncture, incinerate or crush. Do not handle or store near an open flame, heat or other sources of ignition. This material can accumulate static charge which may cause spark and become an ignition source. Store in a well-ventilated place. Store away from incompatible materials (see Section 10 of the SDS).

## 8. Exposure controls/personal protection

### Occupational exposure limits

#### US. ACGIH Threshold Limit Values

Components	Type	Value
carbon dioxide (CAS 124-38-9)	STEL	30000 ppm
isopropyl alcohol (CAS 67-63-0)	TWA	5000 ppm
	STEL	400 ppm
methanol (CAS 67-56-1)	TWA	200 ppm
	STEL	250 ppm
trans-1,2-dichloroethylene (CAS 156-60-5)	TWA	200 ppm
	TWA	200 ppm

#### Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)

Components	Type	Value
carbon dioxide (CAS 124-38-9)	STEL	54000 mg/m <sup>3</sup>
	TWA	30000 ppm
		9000 mg/m <sup>3</sup>
		5000 ppm

**Canada. Alberta OELs (Occupational Health & Safety Code, Schedule 1, Table 2)**

Components	Type	Value
isopropyl alcohol (CAS 67-63-0)	STEL	984 mg/m3
		400 ppm
	TWA	492 mg/m3
		200 ppm
methanol (CAS 67-56-1)	STEL	328 mg/m3
		250 ppm
	TWA	262 mg/m3
		200 ppm
trans-1,2-dichloroethylene (CAS 156-60-5)	TWA	793 mg/m3
		200 ppm

**Canada. British Columbia OELs. (Occupational Exposure Limits for Chemical Substances, Occupational Health and Safety Regulation 296/97, as amended)**

Components	Type	Value
carbon dioxide (CAS 124-38-9)	STEL	15000 ppm
	TWA	5000 ppm
isopropyl alcohol (CAS 67-63-0)	STEL	400 ppm
	TWA	200 ppm
methanol (CAS 67-56-1)	STEL	250 ppm
	TWA	200 ppm
trans-1,2-dichloroethylene (CAS 156-60-5)	TWA	200 ppm

**Canada. Manitoba OELs (Reg. 217/2006, The Workplace Safety And Health Act)**

Components	Type	Value
carbon dioxide (CAS 124-38-9)	STEL	30000 ppm
	TWA	5000 ppm
isopropyl alcohol (CAS 67-63-0)	STEL	400 ppm
	TWA	200 ppm
methanol (CAS 67-56-1)	STEL	250 ppm
	TWA	200 ppm
trans-1,2-dichloroethylene (CAS 156-60-5)	TWA	200 ppm

**Canada. Ontario OELs. (Control of Exposure to Biological or Chemical Agents)**

Components	Type	Value
carbon dioxide (CAS 124-38-9)	STEL	30000 ppm
	TWA	5000 ppm
isopropyl alcohol (CAS 67-63-0)	STEL	400 ppm
	TWA	200 ppm
methanol (CAS 67-56-1)	STEL	250 ppm
	TWA	200 ppm
trans-1,2-dichloroethylene (CAS 156-60-5)	TWA	200 ppm

**Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment)**

Components	Type	Value
carbon dioxide (CAS 124-38-9)	STEL	54000 mg/m3
		30000 ppm
	TWA	9000 mg/m3
		5000 ppm
isopropyl alcohol (CAS 67-63-0)	STEL	1230 mg/m3

**Canada. Quebec OELs. (Ministry of Labor - Regulation Respecting the Quality of the Work Environment)**

Components	Type	Value
methanol (CAS 67-56-1)	TWA	500 ppm 983 mg/m3
	STEL	400 ppm 328 mg/m3
	TWA	250 ppm 262 mg/m3
trans-1,2-dichloroethylene (CAS 156-60-5)	TWA	200 ppm 793 mg/m3
		200 ppm

**Biological limit values**

**ACGIH Biological Exposure Indices**

Components	Value	Determinant	Specimen	Sampling Time
isopropyl alcohol (CAS 67-63-0)	40 mg/l	Acetone	Urine	*
methanol (CAS 67-56-1)	15 mg/l	Methanol	Urine	*

\* - For sampling details, please see the source document.

**Exposure guidelines**

**Canada - Alberta OELs: Skin designation**

methanol (CAS 67-56-1) Can be absorbed through the skin.

**Canada - British Columbia OELs: Skin designation**

methanol (CAS 67-56-1) Can be absorbed through the skin.

**Canada - Manitoba OELs: Skin designation**

methanol (CAS 67-56-1) Can be absorbed through the skin.

**Canada - Ontario OELs: Skin designation**

methanol (CAS 67-56-1) Can be absorbed through the skin.

**Canada - Quebec OELs: Skin designation**

methanol (CAS 67-56-1) Can be absorbed through the skin.

**Canada - Saskatchewan OELs: Skin designation**

methanol (CAS 67-56-1) Can be absorbed through the skin.

**US ACGIH Threshold Limit Values: Skin designation**

methanol (CAS 67-56-1) Can be absorbed through the skin.

**Appropriate engineering controls**

Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.

**Individual protection measures, such as personal protective equipment**

**Eye/face protection** Wear safety glasses with side shields (or goggles).

**Skin protection**

**Hand protection** Wear protective gloves such as: Nitrile. Neoprene. Viton®. Polyvinyl alcohol (PVA).

**Other** Wear appropriate chemical resistant clothing.

**Respiratory protection**

If engineering controls are not feasible or if exposure exceeds the applicable exposure limits, use a NIOSH-approved cartridge respirator with an organic vapor cartridge. Use a self-contained breathing apparatus in confined spaces and for emergencies. Air monitoring is needed to determine actual employee exposure levels.

**Thermal hazards**

Wear appropriate thermal protective clothing, when necessary.

**General hygiene considerations**

When using do not smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

**9. Physical and chemical properties**

**Appearance**

<b>Physical state</b>	Liquid.
<b>Form</b>	Aerosol.
<b>Color</b>	Clear. Colorless.

<b>Odor</b>	Slight ethereal.
<b>Odor threshold</b>	Not available.
<b>pH</b>	Not available.
<b>Melting point/freezing point</b>	-119.2 °F (-84 °C) estimated
<b>Initial boiling point and boiling range</b>	104.2 °F (40.1 °C) estimated
<b>Flash point</b>	None (Tag Closed Cup)
<b>Evaporation rate</b>	Fast.
<b>Flammability (solid, gas)</b>	Not available.
<b>Upper/lower flammability or explosive limits</b>	
<b>Flammability limit - lower (%)</b>	2 % estimated
<b>Flammability limit - upper (%)</b>	19.9 % estimated
<b>Vapor pressure</b>	3265.7 hPa estimated
<b>Vapor density</b>	> 1 (air = 1)
<b>Relative density</b>	1.27 estimated
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	Slight.
<b>Partition coefficient (n-octanol/water)</b>	Not available.
<b>Auto-ignition temperature</b>	860 °F (460 °C) estimated
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	Not available.
<b>Other information</b>	
<b>Percent volatile</b>	95 % estimated

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## 10. Stability and reactivity

<b>Reactivity</b>	The product is stable and non-reactive under normal conditions of use, storage and transport.
<b>Chemical stability</b>	Material is stable under normal conditions.
<b>Possibility of hazardous reactions</b>	No dangerous reaction known under conditions of normal use.
<b>Conditions to avoid</b>	Heat, flames and sparks. When exposed to extreme heat or hot surfaces, vapors may decompose to harmful or fatal corrosive gases such as hydrogen fluoride, hydrogen chloride and possibly phosgene.
<b>Incompatible materials</b>	Strong acids. Alkaline earth metals. Alkali metals. Powdered metal. Caustics. Strong bases.
<b>Hazardous decomposition products</b>	Carbonyl halides. Hydrogen fluoride. Hydrogen chloride. Phosgene. Formaldehyde. Carbon oxides.

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## 11. Toxicological information

### Information on likely routes of exposure

<b>Inhalation</b>	Suffocation (asphyxiant) hazard - if allowed to accumulate to concentrations that reduce oxygen below safe breathing levels. May cause drowsiness and dizziness. Headache. Nausea, vomiting. Prolonged inhalation may be harmful.
<b>Skin contact</b>	Causes skin irritation.
<b>Eye contact</b>	Causes serious eye irritation.
<b>Ingestion</b>	Harmful if swallowed. Droplets of the product aspirated into the lungs through ingestion or vomiting may cause a serious chemical pneumonia.

### Symptoms related to the physical, chemical and toxicological characteristics

Aspiration may cause pulmonary edema and pneumonitis. May cause drowsiness and dizziness. Headache. Fatigue. Nausea, vomiting. Very high exposure can cause suffocation from lack of oxygen. Symptoms may include loss of mobility/consciousness. Victim may not be aware of asphyxiation. Asphyxiation may bring about unconsciousness without warning and so rapidly that victim may be unable to protect themselves. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and pain.

### Information on toxicological effects

**Acute toxicity** In high concentrations, vapors are anesthetic and may cause headache, fatigue, dizziness and central nervous system effects. May be fatal if swallowed and enters airways.

<b>Components</b>	<b>Species</b>	<b>Test Results</b>
1,1,1,3,3-pentafluorobutane (CAS 406-58-6)		
<b>Acute</b>		
<b>Oral</b>		
LD50	Rat	> 2000 mg/kg
decafluoropentane (CAS 138495-42-8)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rabbit	> 5000 mg/kg
<b>Inhalation</b>		
LC50	Rat	11058 mg/kg, 4 hours calculated
<b>Oral</b>		
LD50	Rat	> 5000 mg/kg
isopropyl alcohol (CAS 67-63-0)		
<b>Acute</b>		
<b>Dermal</b>		
LD50	Rabbit	13900 mg/kg
<b>Inhalation</b>		
LC50	Rat	16000 ppm, 4 hours
<b>Oral</b>		
LD50	Rat	4700 mg/kg
trans-1,2-dichloroethylene (CAS 156-60-5)		
<b>Acute</b>		
<b>Oral</b>		
LD50	Rat	1235 mg/kg

\* Estimates for product may be based on additional component data not shown.

<b>Skin corrosion/irritation</b>	Causes skin irritation.
<b>Serious eye damage/eye irritation</b>	Causes serious eye irritation.
<b>Respiratory sensitization</b>	Not a respiratory sensitizer.
<b>Skin sensitization</b>	This product is not expected to cause skin sensitization.
<b>Germ cell mutagenicity</b>	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

#### **Carcinogenicity**

##### **ACGIH Carcinogens**

isopropyl alcohol (CAS 67-63-0) A4 Not classifiable as a human carcinogen.

##### **Canada - Manitoba OELs: carcinogenicity**

isopropyl alcohol (CAS 67-63-0) Not classifiable as a human carcinogen.

<b>Reproductive toxicity</b>	This product is not expected to cause reproductive or developmental effects.
<b>Specific target organ toxicity - single exposure</b>	May cause drowsiness and dizziness.
<b>Specific target organ toxicity - repeated exposure</b>	Not classified.
<b>Aspiration hazard</b>	May be fatal if swallowed and enters airways.
<b>Chronic effects</b>	Prolonged inhalation may be harmful.

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## **12. Ecological information**

**Ecotoxicity** The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.



Components	Species	Test Results
1,1,1,3,3-pentafluorobutane (CAS 406-58-6)		
<b>Aquatic</b>		
<i>Acute</i>		
Algae	EC50	Green algae (Selenastrum capricornutum) > 114 mg/l, 72 hours
	NOEC	Green algae (Selenastrum capricornutum) 13.2 mg/l, 72 hours
Crustacea	EC50	Water flea (Daphnia magna) 980 mg/l, 48 hours
		> 200 mg/l, 48 hours
Fish	LC50	Rainbow trout,donaldson trout (Oncorhynchus mykiss) > 100 mg/l, 96 hours
		Zebra danio (Danio rerio) > 200 mg/l, 96 hours
<i>Chronic</i>		
Fish	NOEC	Fathead minnow (Pimephales promelas) 38.2 mg/l, 30 days
decafluoropentane (CAS 138495-42-8)		
<b>Aquatic</b>		
<i>Acute</i>		
Crustacea	EC50	Water flea (Daphnia magna) 11.7 mg/l, 48 hours
Fish	LC50	Zebra danio (Danio rerio) 13 mg/l, 96 hours
isopropyl alcohol (CAS 67-63-0)		
<b>Aquatic</b>		
<i>Acute</i>		
Crustacea	EC50	Water flea (Daphnia magna) 7550 - 13299 mg/l, 48 hours
Fish	LC50	Fathead minnow (Pimephales promelas) 9640 mg/l, 96 hours
methanol (CAS 67-56-1)		
<b>Aquatic</b>		
Crustacea	EC50	Water flea (Daphnia magna) > 10000 mg/l, 48 hours
Fish	LC50	Fathead minnow (Pimephales promelas) > 100 mg/l, 96 hours
trans-1,2-dichloroethylene (CAS 156-60-5)		
<b>Aquatic</b>		
Fish	LC50	Bluegill (Lepomis macrochirus) 120 - 160 mg/l, 96 hours
<i>Acute</i>		
Crustacea	EC50	Water flea (Daphnia magna) 220 mg/l, 48 hours

\* Estimates for product may be based on additional component data not shown.

**Persistence and degradability** No data is available on the degradability of this product.

**Bioaccumulative potential**

**Partition coefficient n-octanol / water (log Kow)**

1,1,1,3,3-pentafluorobutane	1.61
decafluoropentane	2.7, Pow at 20 °C
isopropyl alcohol	0.05
methanol	-0.77
trans-1,2-dichloroethylene	2.06

**Bioconcentration factor (BCF)**

isopropyl alcohol	3.16
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**Mobility in soil** No data available.

**Other adverse effects** The product contains volatile organic compounds which have a photochemical ozone creation potential.

**13. Disposal considerations**

**Disposal of waste from residues / unused products** Contents under pressure. Do not puncture, incinerate or crush. Empty container can be recycled. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national regulations.



<b>Local disposal regulations</b>	Dispose in accordance with all applicable regulations.
<b>Hazardous waste code</b>	Not regulated.
<b>Contaminated packaging</b>	Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

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## 14. Transport information

### TDG

<b>UN number</b>	UN1950
<b>UN proper shipping name</b>	AEROSOLS, flammable, Limited Quantity
<b>Transport hazard class(es)</b>	
<b>Class</b>	2.1
<b>Subsidiary risk</b>	-
<b>Packing group</b>	Not applicable.
<b>Environmental hazards</b>	No.
<b>Special precautions for user</b>	Read safety instructions, SDS and emergency procedures before handling.
<b>Special provisions</b>	80, 107

### IATA

<b>UN number</b>	UN1950
<b>UN proper shipping name</b>	Aerosols, flammable, Limited Quantity
<b>Transport hazard class(es)</b>	
<b>Class</b>	2.1
<b>Subsidiary risk</b>	-
<b>Packing group</b>	Not applicable.
<b>Environmental hazards</b>	No.
<b>ERG Code</b>	10L
<b>Special precautions for user</b>	Read safety instructions, SDS and emergency procedures before handling.
<b>Other information</b>	
<b>Passenger and cargo aircraft</b>	Allowed with restrictions.
<b>Cargo aircraft only</b>	Allowed with restrictions.

### IMDG

<b>UN number</b>	UN1950
<b>UN proper shipping name</b>	AEROSOLS, Limited Quantity
<b>Transport hazard class(es)</b>	
<b>Class</b>	2
<b>Subsidiary risk</b>	-
<b>Packing group</b>	Not applicable.
<b>Environmental hazards</b>	
<b>Marine pollutant</b>	No.
<b>EmS</b>	Not available.
<b>Special precautions for user</b>	Read safety instructions, SDS and emergency procedures before handling.

**Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not established.

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## 15. Regulatory information

### Canadian regulations

**Canada. Excluded VOCs. Guidelines for Volatile Organic Compounds in Consumer Products. CEPA 1999. Environment Canada, as amended**

1,1,1,3,3-pentafluorobutane (CAS 406-58-6)  
decafluoropentane (CAS 138495-42-8)

**Controlled Drugs and Substances Act**

Not regulated.

**Export Control List (CEPA 1999, Schedule 3)**

Not listed.

**Greenhouse Gases**

carbon dioxide (CAS 124-38-9)  
decafluoropentane (CAS 138495-42-8)

**Ontario. Toxic Substances. Toxic Reduction Act, 2009. Regulation 455/09 (July 1, 2011)**

methanol (CAS 67-56-1)

**Precursor Control Regulations**

Not regulated.

**International regulations**

**Stockholm Convention**

Not applicable.

**Rotterdam Convention**

Not applicable.

**Kyoto protocol**

1,1,1,3,3-pentafluorobutane (CAS 406-58-6)	Listed.
carbon dioxide (CAS 124-38-9)	Listed.
decafluoropentane (CAS 138495-42-8)	Listed.

**Montreal Protocol**

Not applicable.

**Basel Convention**

Not applicable.

**International Inventories**

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	Yes
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	Yes
China	Inventory of Existing Chemical Substances in China (IECSC)	Yes
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	Yes
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

\*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

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**16. Other information**

**Issue date** 10-25-2016

**Version #** 01

**Further information** CRC # 657B/1002685

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