



## SAFETY DATA SHEET

### SECTION 1. Identification of the hazardous chemical substance or mixture and of the supplier or manufacturer

<b>Name of the hazardous chemical substance or mixture</b>	<b>Contact Cleaner - 396 g</b>	
<b>Other means of identification</b>		
<b>Product Code</b>	Item# 1752112	
<b>Recommended use of the hazardous chemical substance or mixture, and restrictions of use</b>		
<b>Recommended use</b>	Precision electronics cleaner	
<b>Recommended restrictions</b>	None known.	
<b>Suppliers details</b>		
<b>Company name</b>	CRC Industrias de Mexico S. de R. L. de C.V.	
<b>Address</b>	Cerrada Canadá 201-H Fraccionamiento Industrial Martel Santa Catarina, NL 66367 Mexico	
<b>Telephone</b>	General Information	81-2139-0572
<b>Website</b>	www.crc-mexico.com	
<b>E-mail</b>	SoporteTecnico@crcind.com	
<b>Emergency phone number</b>	24-Hour Emergency	01-800-681-9531

### SECTION 2. Hazard identification

<b>Classification of the substance or mixture</b>		
<b>Physical hazards</b>	Aerosols	Category 3
<b>Health hazards</b>	Not classified.	
<b>Environmental hazards</b>	Hazardous to the aquatic environment, acute hazard	Category 3
	Hazardous to the aquatic environment, long-term hazard	Category 3

#### Elements of labeling, including precautionary statements and warning pictograms

<b>Hazard symbols</b>	None.	
<b>Signal word</b>	Warning	
<b>Hazard statement</b>		
H229	Pressurized container: May burst if heated.	
H402	Harmful to aquatic life.	
H412	Harmful to aquatic life with long lasting effects.	
<b>Precautionary statement</b>		
<b>Prevention</b>		
P210	Keep away from heat/sparks/open flames/hot surfaces. No smoking.	
P251	Do not pierce or burn, even after use.	
P273	Avoid release to the environment.	
<b>Response</b>	Wash hands after handling.	
<b>Storage</b>		
P410 + P412	Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.	
<b>Disposal</b>		
P501	Dispose of contents/container in accordance with local/regional/national/international regulations.	
<b>Other hazards which do not result in classification</b>	None known.	
<b>Supplemental information</b>	When exposed to extreme heat or hot surfaces, vapors may decompose to harmful or fatal corrosive gases such as hydrogen fluoride.	

## SECTION 3. Composition/information on ingredients

### Mixtures

Chemical identity	Common name(s), synonym(s)	CAS number and other unique identifiers	Concentration
1,1,1,2-tetrafluoroethane	HFC-134A	811-97-2	45 - 55
decafluoropentane	HFC-43-10mee	138495-42-8	0 - 60
methyl nonafluorobutyl ether		163702-07-6	0 - 30
methyl nonafluoroisobutyl ether		163702-08-7	0 - 30

**Composition comments** Specific chemical identity and/or percentage of composition has been withheld as a trade secret.

## SECTION 4. First-aid measures

### Description of necessary first-aid measures

**Inhalation** If symptoms develop move victim to fresh air. Get medical attention if symptoms persist.

**Skin contact** Wash off with soap and water. Get medical attention if irritation develops and persists.

**Eye contact** Rinse with water. Get medical attention if irritation develops and persists.

**Ingestion** Rinse mouth. Get medical attention if symptoms occur.

**Most important symptoms/effects, acute and delayed** Direct contact with eyes may cause temporary irritation.

**Indication of immediate medical attention and special treatment needed** Treat symptomatically.

**General information** Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

## SECTION 5. Fire-fighting measures

**Suitable extinguishing media** Water.

**Unsuitable extinguishing media** None known.

**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.

**Special protective actions 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. Use water spray to cool unopened containers.

## SECTION 6. Measures that must be taken in the event of accidental spillage or an accidental leak

### Personal precautionary measures, protective equipment and emergency procedure

**For non-emergency personnel** Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

**For emergency responders** Keep unnecessary personnel away. Use personal protection recommended in Section 8 of the SDS.

**Environmental precautions** Avoid release to the environment. Inform appropriate managerial or supervisory personnel of all environmental releases. Prevent further leakage or spillage if safe to do so. Avoid discharge into drains, water courses or onto the ground.

**Methods and materials for containing and cleaning up spills or releases** Stop leak if you can do so without risk. Move the cylinder to a safe and open area if the leak is irreparable. Isolate area until gas has dispersed. Eliminate all ignition sources (no smoking, flares, sparks, or flames in immediate area). Keep combustibles (wood, paper, oil, etc.) away from spilled material. Prevent product from entering drains. Clean surface thoroughly to remove residual contamination. For waste disposal, see section 13 of the SDS.

## SECTION 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 re-use empty containers. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Avoid release to the environment. Observe good industrial hygiene practices. For product usage instructions, see the product label.
<b>Conditions for safe storage, including any incompatibilities</b>	Level 1 Aerosol.  Contents under pressure. Do not expose to heat or store at temperatures above 120°F/49°C as can may burst. Do not puncture, incinerate or crush. Do not handle or store near an open flame, heat or other sources of ignition. Store in tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

## SECTION 8. Exposure controls/personal protection

<b>Control parameters</b>	
<b>Occupational exposure limits</b>	No exposure limits noted for ingredient(s).
<b>Biological limit values</b>	No biological exposure limits noted for the ingredient(s).
<b>Control banding approach</b>	Not available.
<b>Appropriate engineering controls</b>	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.
<b>Individual protection measures, such as personal protective equipment (PPE)</b>	
<b>Eye/face protection</b>	Wear safety glasses with side shields (or goggles).
<b>Skin protection</b>	
<b>Hand protection</b>	Wear protective gloves such as: Neoprene. Nitrile. Polyvinyl alcohol (PVA).
<b>Other</b>	Wear appropriate chemical resistant clothing.
<b>Respiratory protection</b>	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.
<b>Thermal hazards</b>	Wear appropriate thermal protective clothing, when necessary.
<b>General hygiene considerations</b>	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.

## SECTION 9. Physical and chemical properties

<b>Appearance</b>	
<b>Physical state</b>	Liquid.
<b>Form</b>	Aerosol.
<b>Color</b>	Clear. Colorless.
<b>Odor</b>	Ethereal and sweetish odor.
<b>Odor threshold</b>	Not available.
<b>pH</b>	Not available.
<b>Melting point/freezing point</b>	-211 °F (-135 °C) estimated
<b>Initial boiling point and boiling range</b>	131 °F (55 °C) estimated
<b>Flash point</b>	None.
<b>Evaporation rate</b>	Very fast.
<b>Flammability (solid, gas)</b>	Not available.
<b>Upper/lower flammability or explosive limits</b>	
<b>Flammability limit - lower (%)</b>	Not applicable.
<b>Flammability limit - upper (%)</b>	Not applicable.

<b>Vapor pressure</b>	3459.3 hPa estimated
<b>Vapor density</b>	> 1 (air = 1)
<b>Relative density</b>	1.55
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	< 140 ppm
<b>Partition coefficient (n-octanol/water)</b>	Not available.
<b>Auto-ignition temperature</b>	761 °F (405 °C) estimated
<b>Decomposition temperature</b>	Not available.
<b>Viscosity</b>	Not available.
<b>Molecular weight</b>	Not available.
<b>Other information</b>	
<b>Percent volatile</b>	100 % estimated

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## SECTION 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 that must be avoided</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. Contact with incompatible materials.
<b>Incompatible materials</b>	Strong oxidizing agents.
<b>Hazardous decomposition products</b>	Hydrogen fluoride.

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## SECTION 11. Toxicological information

### Information about likely routes of entry

<b>Inhalation</b>	Prolonged inhalation may be harmful.
<b>Skin contact</b>	Prolonged skin contact may cause temporary irritation.
<b>Eye contact</b>	Direct contact with eyes may cause temporary irritation.
<b>Ingestion</b>	Expected to be a low ingestion hazard.

<b>Symptoms related to the physical, chemical and toxicological characteristics</b>	Direct contact with eyes may cause temporary irritation.
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### Delayed and immediate effects and also chronic effects from short and long term exposure

#### Numerical measures of toxicity (such as acute toxicity estimates)

<b>Acute toxicity</b>	Not known.
<b>Skin corrosion/irritation</b>	Prolonged skin contact may cause temporary irritation.
<b>Serious eye damage/eye irritation</b>	Direct contact with eyes may cause temporary irritation.

#### Respiratory or skin sensitization

<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.
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<b>Carcinogenicity</b>	Not classifiable as to carcinogenicity to humans.
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<b>Reproductive toxicity</b>	This product is not expected to cause reproductive or developmental effects.
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<b>Specific target organ toxicity - single exposure</b>	Not classified.
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<b>Specific target organ toxicity - repeated exposure</b>	Not classified.
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<b>Aspiration hazard</b>	Not an aspiration hazard.
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<b>Other information</b>	Not available.
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## SECTION 12. Ecotoxicological information

<b>Toxicity</b>	Harmful to aquatic life with long lasting effects.
<b>Persistence and degradability</b>	No data is available on the degradability of this product.
<b>Bioaccumulative potential</b>	
<b>Partition coefficient n-octanol / water (log Kow)</b>	
1,1,1,2-tetrafluoroethane	1.274
<b>Mobility in soil</b>	No data available.
<b>Other adverse effects</b>	No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

## SECTION 13. Disposal considerations

<b>Disposal methods</b>	
<b>Disposal instructions</b>	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Do not incinerate sealed containers. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container in accordance with local/regional/national/international regulations.
<b>Local disposal regulations</b>	Dispose in accordance with all applicable regulations.
<b>Waste from residues / unused products</b>	Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
<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. Do not re-use empty containers.

## SECTION 14. Transport information

### SCT

<b>UN number</b>	UN1950
<b>Proper shipping name</b>	AEROSOLS, Limited Quantity
<b>Transport hazard class(es)</b>	
<b>Class</b>	2.2
<b>Subsidiary risk</b>	-
<b>Packing group</b>	Not available.
<b>Special precautions for user</b>	Read safety instructions, SDS and emergency procedures before handling.
<b>Bulk special provisions</b>	63,190,277,327,344

### DOT

<b>UN number</b>	UN1950
<b>Proper shipping name</b>	Aerosols, non-flammable, Limited Quantity
<b>Transport hazard class(es)</b>	
<b>Class</b>	2.2
<b>Subsidiary risk</b>	-
<b>Packing group</b>	Not available.
<b>Special precautions for user</b>	Read safety instructions, SDS and emergency procedures before handling.
<b>Packaging exceptions</b>	306
<b>Packaging non bulk</b>	None
<b>Packaging bulk</b>	None
<b>Other information</b>	
<b>Passenger and cargo aircraft</b>	Allowed with restrictions.
<b>Cargo aircraft only</b>	Allowed with restrictions.

### IATA

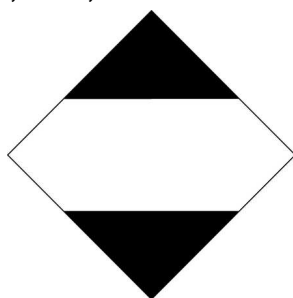
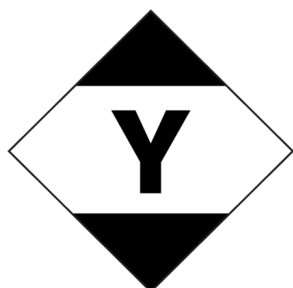
<b>UN number</b>	UN1950
<b>Proper shipping name</b>	Aerosols, non-flammable, Limited Quantity
<b>Transport hazard class(es)</b>	
<b>Class</b>	2.2
<b>Subsidiary risk</b>	-
<b>Packing group</b>	Not available.
<b>ERG Code</b>	2L
<b>Special precautions for user</b>	Read safety instructions, SDS and emergency procedures before handling.

**Other information**

<b>Passenger and cargo aircraft</b>	Allowed with restrictions.
<b>Cargo aircraft only</b>	Allowed with restrictions.

**IMDG**

<b>UN number</b>	UN1950
<b>Proper shipping name</b>	AEROSOLS, Limited Quantity
<b>Transport hazard class(es)</b>	
<b>Class</b>	2.2
<b>Subsidiary risk</b>	-
<b>Packing group</b>	Not available.
<b>Environmental hazards</b>	
<b>Marine pollutant</b>	No.
<b>EmS</b>	F-D, S-U
<b>Special precautions for user</b>	Read safety instructions, SDS and emergency procedures before handling.
<b>Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code</b>	Not established.

**DOT; IMDG; SCT****IATA****SECTION 15. Regulatory information****Safety, health and environmental regulations specific for the hazard chemical substance or mixture in question**

This safety data sheet was prepared in accordance with the Official Mexican Standard (NOM-018-STPS-2015).

**Mexico. Substances subject to reporting for the pollutant release and transfer registry (PRTR)**

1,1,1,2-tetrafluoroethane (CAS 811-97-2)	100 KG
	2500 KG
decafluoropentane (CAS 138495-42-8)	100 KG
	2500 KG
methyl nonafluorobutyl ether (CAS 163702-07-6)	100 KG
	2500 KG

**International regulations****Montreal Protocol**

Not applicable.

**Stockholm Convention**

Not applicable.

**Rotterdam Convention**

Not applicable.

**Kyoto protocol**

1,1,1,2-tetrafluoroethane (CAS 811-97-2) Listed.  
 decafluoropentane (CAS 138495-42-8) Listed.

**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)	No
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)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	Yes
Taiwan	Taiwan Chemical Substance Inventory (TCSI)	Yes
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).

## SECTION 16. Other included information relevant to the preparation and updating of safety data sheets

Issue date 04-07-2020

Version # 01

**List of abbreviations**

ADN: European Agreement Concerning the International Carriage of Dangerous Goods by Inland Waterways.  
 ADR: European Agreement Concerning the International Carriage of Dangerous Goods by Road.  
 DOT: Department of Transportation (49 CFR 172.101).  
 GHS: Globally Harmonized System of Classification and Labeling of Chemicals.  
 IATA: International Air Transport Association.  
 IBC Code: International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk.  
 IMDG Code: International Maritime Dangerous Goods Code.  
 MARPOL: International Convention for the Prevention of Pollution from Ships.  
 SCT: Secretariat of Communications and Transportation (NOM-002-SCT/2011).

**References**

Workplace Threshold Quantities of Hazardous Chemicals  
 NOM-047-SSA1-2011 – Workplace Biological Exposure Indices (BEIs) to Chemical Substances  
 NOM-028-STPS-2012 – Work-Safety Management System for Processes and Critical Equipment Handling Hazardous Chemical Substances  
 NOM-010-STPS-2014 (second revision) – Occupational Exposure Limits – becomes effective on April 28, 2016  
 NMX-R-019-SCFI-2011 - Harmonized system of classification and communication of dangers of chemical products  
 NOM-018-STPS-2015 - Harmonized system for the identification and communication of hazards and risks for hazardous chemicals in the workplace  
 NOM-026-STPS-2008 - Colors and signals of safety and hygiene, and risk identification through fluids in pipes

**Further information**

CRC # 508C-D/1002503-1008115

**Disclaimer**

This information is considered accurate but is not exhaustive and shall only be used as a guideline based on current knowledge of the chemical substance or mixture. Safety precautions suitable for the product must be applied.

The information contained in this document applies to this specific material as supplied. It may not be valid for this material if it is used in combination with any other materials. This information is accurate to the best of CRC's knowledge or obtained from sources believed by CRC to be accurate. Before using any product, read all warnings and directions on the label. For further clarification of any information contained on this (M)SDS consult your supervisor, a health & safety professional, or CRC Industrias de Mexico S. de R. L. de C.V..