



# SAFETY DATA SHEET

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

**Name of the hazardous chemical substance or mixture** Contact Cleaner 2000 Precision Cleaner - 368 g

### Other means of identification

**Product Code** Item# 1750611

### Recommended use of the hazardous chemical substance or mixture, and restrictions of use

**Recommended use** Precision electronics cleaner

**Recommended restrictions** None known.

### Suppliers details

**Company name** CRC Industrias de Mexico S. de R. L. de C.V.  
**Address** Cerrada Canadá 201-H  
 Fraccionamiento Industrial Martel  
 Santa Catarina, NL 66367  
 Mexico  
**Telephone** General Information 81-2139-0572  
**Website** www.crc-mexico.com  
**E-mail** SoporteTecnico@crcind.com

**Emergency phone number** 24-Hour Emergency 800-681-9531

## SECTION 2. Hazard identification

### Classification of the substance or mixture

<b>Physical hazards</b>	Aerosols	Category 2
<b>Health hazards</b>	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 respiratory tract irritation
	Specific target organ toxicity, single exposure	Category 3 narcotic effects
	Aspiration hazard	Category 1
<b>Environmental hazards</b>	Hazardous to the aquatic environment, long-term hazard	Category 3

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



**Signal word** Danger

### Hazard statement

H223	Flammable aerosol.
H229	Pressurized container: May burst if heated.
H302	Harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H336	May cause drowsiness or dizziness.
H412	Harmful to aquatic life with long lasting effects.

### Precautionary statement

#### 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.
P261	Avoid breathing mist/vapors.
P271	Use only outdoors or in a well-ventilated area.
P264	Wash thoroughly after handling.
P270	Do not eat, drink or smoke when using this product.
P273	Avoid release to the environment.
P280	Wear eye protection/face protection.
P280	Wear protective gloves.

**Response**

P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER/doctor.
P330	Rinse mouth.
P331	Do NOT induce vomiting.
P302 + P352	IF ON SKIN: Wash with plenty of water.
P332 + P313	If skin irritation occurs: Get medical advice/attention.
P362 + P364	Take off contaminated clothing and wash it before reuse.
P304 + P340	IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P312	Call a POISON CENTER/doctor if you feel unwell.
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.

**Storage**

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

**Disposal**

P501	Dispose of contents/container in accordance with local/regional/national/international regulations.
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**Other hazards which do not result in classification**

None known.

**Supplemental information**

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

**SECTION 3. Composition/information on ingredients****Mixtures**

Chemical identity	Common name(s), synonym(s)	CAS number and other unique identifiers	Concentration
trans-1,2-dichloroethylene		156-60-5	60 - 70
1,1,2,2-tetrafluoro-1-(2,2,2-trifluoroethoxy) ethane	HFE-347PCF2	406-78-0	20 - 30
carbon dioxide		124-38-9	5 - 10

**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**

<b>Inhalation</b>	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a poison center or doctor/physician if you feel unwell.
<b>Skin contact</b>	Remove contaminated clothing. Wash with plenty of soap and water. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.
<b>Eye contact</b>	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.
<b>Ingestion</b>	Not likely, due to the form of the product. Call a physician or poison control center immediately. Rinse mouth. Do not induce vomiting. If vomiting occurs, keep head low so that stomach content doesn't get into the lungs.

<b>Most important symptoms/effects, acute and delayed</b>	Aspiration may cause pulmonary edema and pneumonitis. May cause drowsiness or dizziness. Headache. Nausea, vomiting. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause respiratory irritation. Skin irritation. May cause redness and pain.
<b>Indication of immediate medical attention and special treatment needed</b>	Provide general supportive measures and treat symptomatically. Keep victim warm. Keep victim under observation. Symptoms may be delayed.
<b>General information</b>	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance.

## SECTION 5. Fire-fighting measures

<b>Suitable extinguishing media</b>	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO <sub>2</sub> ).
<b>Unsuitable extinguishing media</b>	Do not use water jet as an extinguisher, as this will spread the fire.
<b>Specific hazards arising from the chemical</b>	Contents under pressure. Pressurized container may explode 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 toxic gases such as hydrogen fluoride, hydrogen chloride, and possibly phosgene.
<b>Special protective actions for firefighters</b>	Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and in enclosed spaces, SCBA.
<b>Fire fighting equipment/instructions</b>	In case of fire: Stop leak if safe to do so. Do not move cargo or vehicle if cargo has been exposed to heat. 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 explode when exposed to heat or flame.

## 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

<b>For non-emergency personnel</b>	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). Avoid breathing mist/vapors. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Do not touch or walk through spilled material.
<b>For emergency responders</b>	Keep unnecessary personnel away. Keep out of low areas. Ventilate closed spaces before entering them. Avoid breathing mist/vapors. Emergency personnel need self-contained breathing equipment. Local authorities should be advised if significant spillages cannot be contained. Use personal protection recommended in Section 8 of the SDS.
<b>Environmental precautions</b>	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.
<b>Methods and materials for containing and cleaning up spills or releases</b>	Stop leak if you can do so without risk. 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. Absorb in vermiculite, dry sand or earth and place into containers. Following product recovery, flush area with water. 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.

## 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. Use caution around energized equipment. The metal container will conduct electricity if it contacts a live source. This may result in injury to the user from electrical shock and/or flash fire. Do not re-use empty containers. Use only outdoors or in a well-ventilated area. Open doors and windows or use other means to ensure a fresh air supply during use and while product is drying. If you experience any symptoms listed on this label, increase ventilation or leave the area. Do not taste or swallow. Avoid breathing mist/vapors. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. When using, do not eat, drink or smoke. Use only in well-ventilated areas. Wear appropriate personal protective equipment. Wash hands thoroughly after handling. Avoid release to the environment. Observe good industrial hygiene practices.
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**Conditions for safe storage, including any incompatibilities**

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. Store in tightly closed container. Store in a well-ventilated place. Stored containers should be periodically checked for general condition and leakage. Store away from incompatible materials (see Section 10 of the SDS).

**SECTION 8. Exposure controls/personal protection****Control parameters****Occupational exposure limits****Mexico. Occupational Exposure Limit Values**

Components	Type	Value
carbon dioxide (CAS 124-38-9)	STEL	30000 ppm
	TWA	5000 ppm
trans-1,2-dichloroethylene (CAS 156-60-5)	TWA	200 ppm

**US. ACGIH Threshold Limit Values**

Components	Type	Value
carbon dioxide (CAS 124-38-9)	STEL	30000 ppm
	TWA	5000 ppm
trans-1,2-dichloroethylene (CAS 156-60-5)	TWA	200 ppm

**Manufacturer OEL**

Components	Type	Value
1,1,2,2-tetrafluoro-1-(2,2,2-trifluoroethoxy) ethane (CAS 406-78-0)	TWA	50 ppm

**Biological limit values**

No biological exposure limits noted for the ingredient(s).

**Control banding approach**

Not available.

**Appropriate engineering controls**

Good general ventilation 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. Provide eyewash station and safety shower.

**Individual protection measures, such as personal protective equipment (PPE)**

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

**Skin protection****Hand protection**

Wear protective gloves such as: Fluoroelastomer. Nitrile. Polyvinyl alcohol (PVA).

**Other**

Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.

**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. Keep away from food and drink. 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****Appearance**

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

<b>Odor</b>	Ethereal.
<b>Odor threshold</b>	Not available.
<b>pH</b>	Not available.
<b>Melting point/freezing point</b>	-137.2 °F (-94 °C) estimated
<b>Initial boiling point and boiling range</b>	118.4 °F (48 °C) estimated
<b>Flash point</b>	None (Setaflash)
<b>Evaporation rate</b>	Fast.
<b>Flammability (solid, gas)</b>	Not available.
<b>Upper/lower flammability or explosive limits</b>	
<b>Explosive limit - lower (%)</b>	2.2 % estimated
<b>Explosive limit - upper (%)</b>	19.9 % estimated
<b>Vapor pressure</b>	3363.4 hPa estimated
<b>Vapor density</b>	Not available.
<b>Relative density</b>	1.26 estimated
<b>Solubility(ies)</b>	
<b>Solubility (water)</b>	Negligible.
<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>Molecular weight</b>	Not available.
<b>Other information</b>	
<b>Percent volatile</b>	95 % 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. Contact with incompatible materials. When exposed to extreme heat or hot surfaces, vapors may decompose to toxic gases such as hydrogen fluoride, hydrogen chloride, and possibly phosgene.
<b>Incompatible materials</b>	Strong oxidizing agents. Strong acids. Strong bases.
<b>Hazardous decomposition products</b>	Halogenated materials. Hydrogen chloride. Carbon oxides. Hydrogen fluoride. Phosgene. Sulfur oxides.

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## SECTION 11. Toxicological information

### Information about likely routes of entry

<b>Inhalation</b>	May cause drowsiness or dizziness. Headache. Nausea, vomiting. May cause irritation to the respiratory system. 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.

<b>Symptoms related to the physical, chemical and toxicological characteristics</b>	Aspiration may cause pulmonary edema and pneumonitis. May cause drowsiness or dizziness. Headache. Nausea, vomiting. Severe eye irritation. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. May cause respiratory irritation. Skin irritation. May cause redness and pain.
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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>	May be fatal if swallowed and enters airways. In high concentrations, vapors are anesthetic and may cause headache, fatigue, dizziness and central nervous system effects.
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<b>Skin corrosion/irritation</b>	Causes skin irritation.
<b>Serious eye damage/eye irritation</b>	Causes serious eye irritation.
<b>Respiratory or skin sensitization</b>	
<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.
<b>Carcinogenicity</b>	Not classifiable as to carcinogenicity to humans.
<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 respiratory irritation. May cause drowsiness or dizziness.
<b>Specific target organ toxicity - repeated exposure</b>	Not classified.
<b>Aspiration hazard</b>	May be fatal if swallowed and enters airways.
<b>Other information</b>	Not available.

## 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 any ingredients in the mixture.
<b>Bioaccumulative potential</b>	No data available.
<b>Partition coefficient n-octanol / water (log Kow)</b>	
1,1,2,2-tetrafluoro-1-(2,2,2-trifluoroethoxy) ethane	2.18
trans-1,2-dichloroethylene	2.06
<b>Mobility in soil</b>	No data available.
<b>Other adverse effects</b>	Not established.

## 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. Contents under pressure. 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>	2.1
<b>Subsidiary risk</b>	-
<b>Packing group</b>	Not assigned.
<b>Environmental hazards</b>	No.
<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, flammable, Limited Quantity
<b>Transport hazard class(es)</b>	
<b>Class</b>	2.1

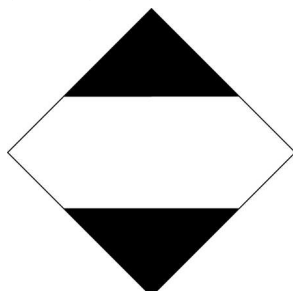
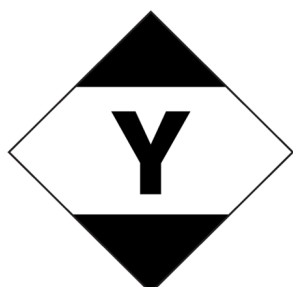
<b>Subsidiary risk</b>	-
<b>Label(s)</b>	2.1
<b>Packing group</b>	Not assigned.
<b>Environmental hazards</b>	
<b>Marine pollutant</b>	No.
<b>Special precautions for user</b>	Read safety instructions, SDS and emergency procedures before handling.
<b>Special provisions</b>	N82
<b>Packaging exceptions</b>	306
<b>Packaging non bulk</b>	None
<b>Packaging bulk</b>	None

**IATA**

<b>UN number</b>	UN1950
<b>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 assigned.
<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>Proper shipping name</b>	AEROSOLS, Limited Quantity
<b>Transport hazard class(es)</b>	
<b>Class</b>	2.1
<b>Subsidiary risk</b>	-
<b>Packing group</b>	Not assigned.
<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)

carbon dioxide (CAS 124-38-9) 100000 KG

### International regulations

#### Montreal Protocol

Not applicable.

#### Stockholm Convention

Not applicable.

#### Rotterdam Convention

Not applicable.

#### Kyoto protocol

carbon dioxide (CAS 124-38-9) Listed.

#### Basel Convention

Not applicable.

### International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Industrial Chemicals (AICIS)	No
Canada	Domestic Substances List (DSL)	No
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)	No
Korea	Existing Chemicals List (ECL)	Yes
New Zealand	New Zealand Inventory	No
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
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** 08-19-2022

**Version #** 01

### List of abbreviations

ACGIH: American Conference of Governmental Industrial Hygienists.  
 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.  
 ANTT: National Agency of Land Transport.  
 CAS: Chemical Abstract Service.  
 DOT: Department of Transportation.  
 GHS: Globally Harmonized System of Classification and Labeling of Chemicals.  
 IARC: International Agency for Research on Cancer.  
 IATA: International Air Transport Association.  
 IBC Code: International Code for the Construction and Equipment of Ships Carrying Dangerous Chemicals in Bulk.  
 IMDG: International Maritime Dangerous Goods.  
 MARPOL: International Convention for the Prevention of Pollution from Ships.

NFPA: National Fire Protection Association.  
RID: Regulations concerning the International Carriage of Dangerous Goods by Rail.  
SCT: Secretariat of Communications and Transportation (NOM-002-SCT/2011).  
STEL: Short term exposure limit.  
TWA: Time Weighted Average.

**References**

NMX-R-019-SCFI-2011 - Harmonized system of classification and communication of dangers of chemical products  
NOM-010-STPS-2014 (second revision) – Occupational Exposure Limits – becomes effective on April 28, 2016  
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  
NOM-028-STPS-2012 – Work-Safety Management System for Processes and Critical Equipment Handling Hazardous Chemical Substances  
NOM-047-SSA1-2011 – Workplace Biological Exposure Indices (BEIs) to Chemical Substances Workplace Threshold Quantities of Hazardous Chemicals

**Further information**

CRC # 1753496

**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..

**Revision information**

This document has undergone significant changes and should be reviewed in its entirety.