



SAFETY DATA SHEET

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

GHS product identifier	QD Contact Cleaner	
Other means of identification		
Product Code	Item# 1750603	
Recommended use of the chemical and restrictions on use		
Recommended use	Electronic 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	01-800-681-9531

SECTION 2: Hazard identification

Classification of the substance or mixture

Physical hazards	Aerosols	Category 1
Health hazards	Acute toxicity, oral	Category 5
	Acute toxicity, dermal	Category 5
	Skin corrosion/irritation	Category 2
	Specific target organ toxicity, single exposure	Category 3 narcotic effects
	Aspiration hazard	Category 1
Environmental hazards	Hazardous to the aquatic environment, acute hazard	Category 1
	Hazardous to the aquatic environment, long-term hazard	Category 1

GHS label elements, including precautionary statements



Signal word Danger

Hazard statement

H222	Extremely flammable aerosol.
H229	Pressurized container: May burst if heated.
H303	May be harmful if swallowed.
H304	May be fatal if swallowed and enters airways.
H313	May be harmful in contact with skin.
H315	Causes skin irritation.
H336	May cause drowsiness or dizziness.
H400	Very toxic to aquatic life.
H410	Very toxic 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/vapor.
P264	Wash thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
P273	Avoid release to the environment.
P280	Wear protective gloves.

Response

P301 + P310	IF SWALLOWED: Immediately call a POISON CENTER/doctor.
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.
P391	Collect spillage.

Storage

P403 + P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
P410 + P412	Protect from sunlight. 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 None.

SECTION 3. Composition/information on ingredients

Mixtures

Chemical identity	Common name(s), synonym(s)	CAS number and other unique identifiers	Concentration
naphtha (petroleum), hydrotreated light		64742-49-0	30 - 40
1,1-difluoroethane		75-37-6	20 - 30
n-heptane		142-82-5	10 - 20
3-methylhexane		589-34-4	5 - 10
methylcyclohexane		108-87-2	5 - 10
2,2,4-trimethylpentane		540-84-1	3 - 5
2-methylhexane		591-76-4	3 - 5
2,3-dimethylpentane		565-59-3	1 - 3
3-ethylpentane		617-78-7	1 - 3

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	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.
Skin contact	Remove contaminated clothing. Wash with plenty of soap and water. Get medical advice/attention if you feel unwell. If skin irritation occurs: Get medical advice/attention. Wash contaminated clothing before reuse.
Eye contact	Rinse with water. Get medical attention if irritation develops and persists.
Ingestion	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.

Most important symptoms/effects, acute and delayed	Aspiration may cause pulmonary edema and pneumonitis. May cause drowsiness and dizziness. Headache. Nausea, vomiting. 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 under observation. Symptoms may be delayed.
General information	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

Suitable extinguishing media	Foam. Powder. Carbon dioxide (CO ₂).
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.
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	Move containers from fire area if you can do so without risk. Containers should be cooled with water to prevent vapor pressure build up.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials. In the event of fire and/or explosion do not breathe fumes.
General fire hazards	Extremely flammable aerosol.

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

Personal precautions, protective equipment and emergency procedures

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. Avoid breathing mist/vapor. 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.
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 containment and cleaning up	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. Prevent product from entering drains. 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.

SECTION 7. Handling and storage

Precautions to ensure safe handling	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 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. Wash contaminated clothing before reuse. Observe good industrial hygiene practices.
Conditions for safe storage, including any incompatibilities	Level 3 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 tightly closed container. 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
2,3-dimethylpentane (CAS 565-59-3)	STEL	500 ppm
	TWA	400 ppm
methylcyclohexane (CAS 108-87-2)	TWA	400 ppm
n-heptane (CAS 142-82-5)	STEL	500 ppm
	TWA	400 ppm

US. ACGIH Threshold Limit Values

Components	Type	Value
2,3-dimethylpentane (CAS 565-59-3)	STEL	500 ppm
	TWA	400 ppm
2-methylhexane (CAS 591-76-4)	STEL	500 ppm
	TWA	400 ppm
3-ethylpentane (CAS 617-78-7)	STEL	500 ppm
	TWA	400 ppm
3-methylhexane (CAS 589-34-4)	STEL	500 ppm
	TWA	400 ppm
methylcyclohexane (CAS 108-87-2)	TWA	400 ppm
n-heptane (CAS 142-82-5)	STEL	500 ppm
	TWA	400 ppm

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

Control banding approach Not available.

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. Provide eyewash station and safety shower.

Hazardous Chemicals (NOM-028-STPS-2012, System for administration of workplace safety in the process and critical equipment for handling hazardous chemicals, Appendix A, Table A.I, 9/6/2012)

n-heptane (CAS 142-82-5) 4600 KG

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: Polyvinyl alcohol (PVA). Viton/butyl.

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

Physical state Liquid.

Form	Aerosol.
Color	Colorless.
Odor	Hydrocarbon-like.
Odor threshold	Not available.
pH	Not available.
Melting point/freezing point	-195.9 °F (-126.6 °C) estimated
Initial boiling point and boiling range	179.6 °F (82 °C) estimated
Flash point	15.8 °F (-9 °C) estimated
Evaporation rate	Very fast.
Flammability (solid, gas)	Not available.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	0.9 % estimated
Flammability limit - upper (%)	12 % estimated
Vapor pressure	2003.8 hPa estimated
Vapor density	> 1 (air = 1)
Relative density	0.75 estimated
Solubility(ies)	
Solubility (water)	Negligible.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	509 °F (265 °C) estimated
Decomposition temperature	Not available.
Viscosity	Not available.
Molecular weight	Not available.
Other information	
Percent volatile	98.1 % estimated

SECTION 10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. Contact with incompatible materials.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	Carbon oxides.

SECTION 11. Toxicological information

Information on likely routes of exposure

Inhalation	May cause drowsiness and dizziness. Headache. Nausea, vomiting. Prolonged inhalation may be harmful.
Skin contact	May be harmful in contact with skin. Causes skin irritation.
Eye contact	Direct contact with eyes may cause temporary irritation.
Ingestion	May be 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. Nausea, vomiting. 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

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. May be harmful in contact with skin.

Components	Species	Test Results
2,2,4-trimethylpentane (CAS 540-84-1)		
Acute		
Inhalation		
LC50	Rat	118 mg/l, 4 Hours
3-methylhexane (CAS 589-34-4)		
Acute		
Dermal		
LD50	Rabbit	> 2000 mg/kg
Inhalation		
LC50	Rat	> 20 mg/l, 4 hours
Oral		
LD50	Rat	> 2000 mg/kg
methylcyclohexane (CAS 108-87-2)		
Acute		
Dermal		
LD50	Rabbit	> 2000 mg/kg
Oral		
LD50	Rat	> 4000 mg/kg
naphtha (petroleum), hydrotreated light (CAS 64742-49-0)		
Acute		
Dermal		
LD50	Rabbit	> 2000 mg/kg
Inhalation		
LC50	Rat	61 mg/l, 4 Hours
Oral		
LD50	Rat	> 5000 mg/kg
n-heptane (CAS 142-82-5)		
Acute		
Dermal		
LD50	Rabbit	3000 mg/kg
Inhalation		
<i>Vapor</i>		
LC50	Rat	> 73.5 mg/l, 4 hours
Oral		
LD50	Rat	25000 mg/kg
Skin corrosion/irritation	Causes skin irritation.	
Serious eye damage/eye irritation	Direct contact with eyes may cause temporary irritation.	
Respiratory or skin sensitization		
Respiratory sensitization	Not a respiratory sensitizer.	
Skin sensitization	This product is not expected to cause skin sensitization.	
Germ cell mutagenicity	No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.	
Carcinogenicity	Not classifiable as to carcinogenicity to humans.	
Reproductive toxicity	This product is not expected to cause reproductive or developmental effects.	
Specific target organ toxicity - single exposure	May cause drowsiness and dizziness.	

Specific target organ toxicity - repeated exposure	Not classified.
Aspiration hazard	May be fatal if swallowed and enters airways.
Other information	Not available.

SECTION 12. Ecotoxicological information

Ecotoxicity	Very toxic to aquatic life with long lasting effects.
Persistence and degradability	No data is available on the degradability of any ingredients in the mixture.
Bioaccumulative potential	
Partition coefficient n-octanol / water (log Kow)	
1,1-difluoroethane	0.75
2,2,4-trimethylpentane	5.18
methylcyclohexane	3.61
n-heptane	4.66
Bioconcentration factor (BCF)	
naphtha (petroleum), hydrotreated light	10 - 25000
Mobility in soil	No data available.
Other adverse effects	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

Disposal methods	
Disposal instructions	Collect and reclaim or dispose in sealed containers at licensed waste disposal site. Contents under pressure. Do not puncture, incinerate or crush. 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.
Local disposal regulations	Dispose in accordance with all applicable regulations.
Waste from residues / unused products	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).
Contaminated packaging	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

UN number	UN1950
UN proper shipping name	AEROSOLS, Limited Quantity
Transport hazard class(es)	
Class	2.1
Subsidiary risk	-
Packing group	Not applicable.
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
Bulk special provisions	63,190,277,327,344

DOT

UN number	UN1950
UN proper shipping name	Aerosols, flammable, Limited Quantity
Transport hazard class(es)	
Class	2.1
Subsidiary risk	-
Label(s)	2.1
Packing group	Not applicable.
Environmental hazards	
Marine pollutant	Yes, but exempt from the regulations.
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
Special provisions	N82
Packaging exceptions	306
Packaging non bulk	None
Packaging bulk	None

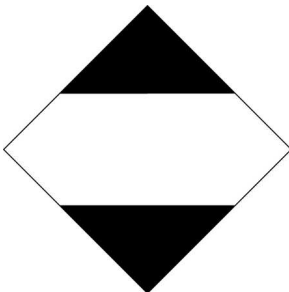
IATA

UN number	UN1950
UN proper shipping name	Aerosols, flammable, Limited Quantity
Transport hazard class(es)	
Class	2.1
Subsidiary risk	-
Packing group	Not applicable.
ERG Code	10L
Special precautions for user	Read safety instructions, SDS and emergency procedures before handling.
Other information	
Passenger and cargo aircraft	Allowed with restrictions.
Cargo aircraft only	Allowed with restrictions.

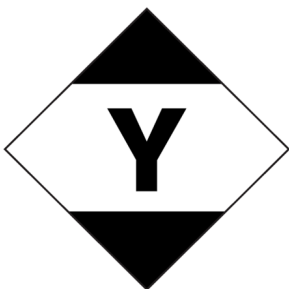
IMDG

UN number	UN1950
UN proper shipping name	AEROSOLS, Limited Quantity
Transport hazard class(es)	
Class	2.1
Subsidiary risk	-
Packing group	Not applicable.
Environmental hazards	
Marine pollutant	Yes, but exempt from the regulations.
EmS	F-D, S-U
Special precautions for user	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.

DOT; IMDG; SCT



IATA



SECTION 15. Regulatory information

Safety, health and environmental regulations specific for the product in question

Mexico. Hazard identification guidance list (NOM-018-STPS)

2,2,4-trimethylpentane (CAS 540-84-1)	Listed.
2,3-dimethylpentane (CAS 565-59-3)	Listed.
2-methylhexane (CAS 591-76-4)	Listed.
3-ethylpentane (CAS 617-78-7)	Listed.
3-methylhexane (CAS 589-34-4)	Listed.
methylcyclohexane (CAS 108-87-2)	Listed.

naphtha (petroleum), hydrotreated light (CAS 64742-49-0) Listed.
n-heptane (CAS 142-82-5) Listed.

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

1,1-difluoroethane (CAS 75-37-6) 100 KG
2500 KG

International regulations

Montreal Protocol

Not applicable.

Stockholm Convention

Not applicable.

Rotterdam Convention

Not applicable.

Kyoto protocol

1,1-difluoroethane (CAS 75-37-6) Listed.

Basel Convention

Not applicable.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	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)	Yes
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	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 05-08-2018

Revision date 01-07-2019

Version # 02

List of abbreviations

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

References

NOM-047-SSA1-2011 – Workplace Biological Exposure Indices (BEIs) to Chemical Substances
Workplace Threshold Quantities of Hazardous Chemicals
NOM-028-STPS-2012 – Work-Safety Management System for Processes and Critical Equipment
Handling Hazardous Chemical Substances
NOM-018-STPS-2000 – Workplace Hazardous Chemical Substances Communication and
Identification Standard
NOM-010-STPS-2014 (second revision) – Occupational Exposure Limits – becomes effective on
April 28, 2016

Further information

CRC # 1750971

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.