# CRO

# SAFETY DATA SHEET

# 1. Identification

Product identifier QD® Contact Cleaner

Other means of identification

**Product Code** No. 02130 (Item# 1003218)

Recommended use Electronic cleaner
Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Manufactured or sold by:

Company name CRC Industries, Inc.

Address 885 Louis Dr.

Warminster, PA 18974 US

**Telephone** 

 General Information
 215-674-4300

 Technical Assistance
 800-521-3168

 Customer Service
 800-272-4620

 24-Hour Emergency
 800-424-9300 (US)

(CHEMTREC)

Website

www.crcindustries.com

# 2. Hazard(s) identification

Physical hazards Flammable aerosols Category 1

Gases under pressure Liquefied gas
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 Category 1

hazard

Hazardous to the aquatic environment,

long-term hazard

OSHA defined hazards Not classified.

Label elements

**Health hazards** 



Signal word Danger

Hazard statement Extremely flammable aerosol. Contains gas under pressure; may explode if heated. May be fatal if

swallowed and enters airways. Causes skin irritation. May cause drowsiness or dizziness. Very

Category 1

toxic to aquatic life. Very toxic to aquatic life with long lasting effects.

Precautionary statement Prevention

Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Do not spray on an open flame or other ignition source. Pressurized container: Do not pierce or burn, even after use. Do not apply while equipment is energized. Extinguish all flames, pilot lights, and heaters. Vapors will accumulate readily and may ignite. Use only with adequate ventilation; maintain ventilation during use and until all vapors are gone. 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. Avoid breathing mist/vapor. Wash thoroughly after handling. Wear protective gloves. Avoid release to the environment.

Material name: QD® Contact Cleaner sps us

Response If swallowed: Immediately call a poison center/doctor. Do NOT induce vomiting. If on skin: Wash

with plenty of water. If skin irritation occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse. If inhaled: Remove person to fresh air and keep comfortable for

breathing. Call a poison center/doctor if you feel unwell. Collect spillage.

Storage Store in a well-ventilated place. Store locked up. Protect from sunlight. Do not expose to

temperatures exceeding 50°C/122°F. Exposure to high temperature may cause can to burst.

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

Hazard(s) not otherwise classified (HNOC)

Static accumulating flammable liquid can become electrostatically charged even in bonded and grounded equipment. Sparks may ignite liquid and vapor. May cause flash fire or explosion.

Supplemental information None.

# 3. Composition/information on ingredients

#### **Mixtures**

Chemical name	Common name and synonyms	CAS number	<u></u>
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
3,3-dimethylpentane		562-49-2	< 1

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

## 4. 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. 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

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.

Aspiration may cause pulmonary edema and pneumonitis. May cause drowsiness and dizziness.

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

## 5. Fire-fighting measures

Suitable extinguishing media Water fog. Foam. Carbon dioxide (CO2). Dry chemical powder, carbon dioxide, sand or earth may

be used for small fires only.

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. This product is a poor conductor of electricity and can become electrostatically charged. If sufficient charge is accumulated, ignition of flammable mixtures can occur. Static electricity accumulation may be significantly increased by the presence of small quantities of water or other contaminants. Material will float and may ignite on surface of water. During fire, gases hazardous to health may

be formed.

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. 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. Contents under pressure. Pressurized container may rupture when exposed to heat or flame.

#### 6. Accidental release measures

Personal precautions, protective equipment and emergency procedures Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Remove all possible sources of ignition in the surrounding area. 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/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. Use appropriate containment to avoid environmental contamination. Local authorities should be advised if significant spillages cannot be contained. For personal protection, see section 8 of the SDS.

Methods and materials for containment and cleaning up

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. Stop the flow of material, if this is without risk. 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.

**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. Use appropriate containment to avoid environmental contamination.

# 7. Handling and storage

Precautions for safe handling

Minimize fire risks from flammable and combustible materials (including combustible dust and static accumulating liquids) or dangerous reactions with incompatible materials. 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. Avoid contact with eyes, skin, and clothing. Avoid prolonged exposure. 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. For product usage instructions, see the product label.

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. Avoid spark promoters. These alone may be insufficient to remove static electricity. 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).

# 8. Exposure controls/personal protection

#### Occupational exposure limits

The following constituents are the only constituents of the product which have a PEL, TLV or other recommended exposure limit. At this time, the other constituents have no known exposure limits.

#### US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000) Components Value Type 2,2,4-trimethylpentane PEL 2350 mg/m3 (CAS 540-84-1) 500 ppm methylcyclohexane (CAS PEL 2000 mg/m3 108-87-2) 500 ppm **PEL** 400 mg/m3 naphtha (petroleum), hydrotreated light (CAS 64742-49-0)

Material name: QD® Contact Cleaner

100 ppm	US. OSHA Table Z-1 Limits for Air Components	Туре	Value	
Description   Pet			100 ppm	
US. ACGIH Threshold Limit Values Components  Type  Value  2.3-dimethylpentane (CAS 565-59-3)  TWA 400 ppm  2-methylpentane (CAS 57EL 500 ppm  3.3-dimethylpentane (CAS 57EL 500 ppm  3.3-dimethylpentane (CAS 57EL 500 ppm  3.3-dimethylpentane (CAS 57EL 500 ppm  3.4-dhylpentane (CAS 57EL 500 ppm  3-methylpentane (CAS 57EL 500 ppm  3-methylpentane (CAS 57EL 500 ppm  3-methylpentane (CAS 57EL 500 ppm  400 ppm  3-methylpentane (CAS 57EL 500 ppm  400 ppm	n-heptane (CAS 142-82-5)	PEL	• •	
Components         Type         Value           2,3-dimethylpentane (CAS)         STEL         500 ppm           565-59-3)         TWA         400 ppm           2-methylhexane (CAS)         STEL         500 ppm           591-76-4)         TWA         400 ppm           3,3-dimethylpentane (CAS)         STEL         500 ppm           562-49-2)         TWA         400 ppm           3,3-dihylpentane (CAS)         STEL         500 ppm           517-78-7)         TWA         400 ppm           3,3-methylhexane (CAS)         STEL         500 ppm           517-78-7)         TWA         400 ppm           3,3-methylhexane (CAS)         STEL         500 ppm           617-78-7)         TWA         400 ppm           methylcyclohexane (CAS)         TWA         400 ppm           methylcyclohexane (CAS)         TWA         400 ppm           US. NIOSH: Pocket Guide to Chemical Hazards         Type         Value           Components         TWA         385 ppm           TWA         385 ppm         385 ppm           methylcyclohexane (CAS         TWA         1600 mg/m3           108-87-2)         400 ppm         400 ppm           n-heptane (CAS	. ,			
Type	US. ACGIH Threshold Limit Values			
TWA			Value	
TWA 400 ppm 591-76-4)  TWA 400 ppm 3.3-dimethylpentane (CAS 5TEL 500 ppm 562-49-2)  TWA 400 ppm 3ethylpentane (CAS 5TEL 500 ppm 617-78-7)  TWA 400 ppm 3-methylpentane (CAS 5TEL 500 ppm 617-78-7)  TWA 400 ppm 3-methylpentane (CAS 5TEL 500 ppm 617-78-7)  TWA 400 ppm 3-methylpexane (CAS 5TEL 500 ppm 617-78-7)  TWA 400 ppm 618-7-2)  TWA 350 mg/m3 75 ppm 618-87-2)  TWA 1600 mg/m3 618-87-2)  TWA 400 ppm 618-87-2)  TWA 400 ppm 618-87-2)  TWA 350 mg/m3 75 ppm 618-87-2)  TWA 400 ppm 618-87-2)  TWA 400 ppm 618-87-2)  TWA 400 ppm 618-87-2)  TWA 350 mg/m3 64742-49-0)  TWA 350 mg/m3 64742-49-0)  TWA 350 mg/m3 64742-49-0)  TWA 350 mg/m3 65 ppm  TWA 350 mg/m3 65 ppm  US. Workplace Environmental Exposure Level (WEEL) Guides Components Type Value		STEL	500 ppm	
591-76-4)  TWA 400 ppm  3.3-dimethylpentane (CAS STEL 500 ppm  562-49-2)  TWA 400 ppm  3-ethylpentane (CAS STEL 500 ppm  3-ethylpentane (CAS STEL 500 ppm  3-methyltexane (CAS STEL 500 ppm  3-methylcxane (CAS STEL 500 ppm  3-methylcxane (CAS TWA 400 ppm  TWA 400 ppm  methylcyclohexane (CAS TWA 400 ppm  TWA 300 ppm  TWA 300 ppm  TWA 400 ppm  1 800 mg/m3  TOPP  TWA 350 mg/m3  TOPP  TWA 350 mg/m3  TOPP  TWA 400 ppm  TWA 400 ppm  TWA 350 mg/m3  TOPP  TWA 400 ppm  TWA 400 ppm  TWA 350 mg/m3  TOPP  TWA 400 ppm  TWA 400 ppm  TWA 400 ppm  TWA 400 ppm  TWA 350 mg/m3  TOPP  TWA 400 ppm  TWA 550 mg/m3  85 ppm  US. Workplace Environmental Exposure Level (WEEL) Guides  Components Type Value	· · · · · · · · · · · · · · · · · · ·	TWA	400 ppm	
3.3-dimethylpentane (CAS   STEL   500 ppm    TWA   400 ppm    3-ethylpentane (CAS   STEL   500 ppm    3-ethylpentane (CAS   STEL   500 ppm    3-methyltexane (CAS   STEL   500 ppm    3-methylcyclohexane (CAS   STEL   500 ppm    3-methylcyclohexane (CAS   STEL   500 ppm    methylcyclohexane (CAS   TWA   400 ppm    TWA   400 ppm    US. NIOSH: Pocket Guide to Chemical Hazards    Components   Type   Value    2,2,4-trimethylpentane   Celling   1800 mg/m3    TWA   350 mg/m3    75 ppm    methylcyclohexane (CAS   TWA   1600 mg/m3    methylcyclohexane (CAS   TWA   400 ppm    methylcyclohexane (CAS   TWA   400 mg/m3    maphtha (petroleum), TWA   400 mg/m3    naphtha (petroleum), TWA   400 mg/m3    naphtha (petroleum), TWA   400 mg/m3    naphtha (petroleum)   TWA   400 mg/m3    naphtha (petroleum)   TWA   350 mg/m3    35 ppm    US. Workplace Environmental Exposure Level (WEEL) Guides    Components   Type   Value    1,1-diffuoroethane (CAS   TWA   2700 mg/m3		STEL	500 ppm	
TWA		TWA	400 ppm	
Saethylpentane (CAS   STEL   500 ppm		STEL	500 ppm	
## A 100 ppm   TWA		TWA	400 ppm	
3-methylhexane (CAS   STEL   500 ppm   589-34-4)   TWA   400 ppm   methylcyclohexane (CAS   TWA   400 ppm   108-87-2)   n-heptane (CAS 142-82-5)   STEL   500 ppm   TWA   400 ppm    US. NIOSH: Pocket Guide to Chemical Hazards   Components   Type   Value   2,2,4-trimethylpentane   Ceiling   1800 mg/m3   (CAS 540-84-1)   385 ppm   TWA   350 mg/m3   75 ppm   methylcyclohexane (CAS   TWA   1600 mg/m3   108-87-2)   400 ppm   naphtha (petroleum), hydrotreated light (CAS 64742-49-0)   100 ppm   n-heptane (CAS 142-82-5)   Ceiling   1800 mg/m3   440 ppm   17WA   350 mg/m3   350 ppm    US. Workplace Environmental Exposure Level (WEEL) Guides   Components   Type   Value   1,1-difilioroethane (CAS   TWA   2700 mg/m3		STEL	500 ppm	
TWA   400 ppm		TWA	400 ppm	
methylcyclohexane (CAS 108-87-2) n-heptane (CAS 142-82-5)		STEL	500 ppm	
108-67-2) n-heptane (CAS 142-82-5)		TWA	400 ppm	
US. NIOSH: Pocket Guide to Chemical Hazards Components  Type  2,2,4-trimethylpentane (CAS 540-84-1)  TWA  TWA  385 ppm  TWA  350 mg/m3  75 ppm  methylcyclohexane (CAS 108-87-2)  100 ppm  naphtha (petroleum), hydrotreated light (CAS 64742-49-0)  100 ppm  n-heptane (CAS 142-82-5)  Ceiling  TWA  350 mg/m3  100 ppm  100 ppm  100 ppm  100 ppm  TWA  350 mg/m3  440 ppm  TWA  350 mg/m3  440 ppm  TWA  350 mg/m3  85 ppm  US. Workplace Environmental Exposure Level (WEEL) Guides Components  Type  Value  1,1-difluoroethane (CAS  TWA  2700 mg/m3		TWA	400 ppm	
US. NIOSH: Pocket Guide to Chemical Hazards   Type	n-heptane (CAS 142-82-5)	STEL	500 ppm	
Components         Type         Value           2,2,4-trimethylpentane (CAS 540-84-1)         Ceiling         1800 mg/m3           385 ppm         350 mg/m3         75 ppm           methylcyclohexane (CAS 108-87-2)         TWA         1600 mg/m3           maphtha (petroleum), hydrotreated light (CAS 64742-49-0)         TWA         400 mg/m3           n-heptane (CAS 142-82-5)         Ceiling         1800 mg/m3           A40 ppm         TWA         350 mg/m3           A40 ppm         350 mg/m3         85 ppm           US. Workplace Environmental Exposure Level (WEEL) Guides Components         Type         Value           1,1-difluoroethane (CAS)         TWA         2700 mg/m3		TWA	400 ppm	
2,2,4-trimethylpentane (CAS 540-84-1)  Ceiling  1800 mg/m3  385 ppm  350 mg/m3  75 ppm  methylcyclohexane (CAS 108-87-2)  400 ppm  naphtha (petroleum), hydrotreated light (CAS 64742-49-0)  n-heptane (CAS 142-82-5)  Ceiling  TWA  1600 mg/m3  400 mg/m3  100 ppm  100 ppm  100 ppm  170		nical Hazards		
(CAS 540-84-1)  TWA  385 ppm  350 mg/m3  75 ppm  methylcyclohexane (CAS 108-87-2)  400 ppm  naphtha (petroleum), hydrotreated light (CAS 64742-49-0)  100 ppm  n-heptane (CAS 142-82-5)  Ceiling  TWA  385 ppm  400 mg/m3  400 ppm  100 ppm  1800 mg/m3  440 ppm  TWA 350 mg/m3  85 ppm  US. Workplace Environmental Exposure Level (WEEL) Guides Components  Type  Value  1,1-difluoroethane (CAS TWA 2700 mg/m3	Components	Туре	Value	
TWA 350 mg/m3 75 ppm methylcyclohexane (CAS TWA 1600 mg/m3 108-87-2)  naphtha (petroleum), hydrotreated light (CAS 64742-49-0)  n-heptane (CAS 142-82-5)  TWA  Ceiling  TWA  TWA  100 ppm 100 ppm 100 ppm 1800 mg/m3 440 ppm 350 mg/m3 440 ppm 350 mg/m3 85 ppm  US. Workplace Environmental Exposure Level (WEEL) Guides Components  Type  Value  1,1-difluoroethane (CAS TWA)  2700 mg/m3		Ceiling	-	
75 ppm methylcyclohexane (CAS 108-87-2)				
methylcyclohexane (CAS 108-87-2)       TWA       1600 mg/m3         108-87-2)       400 ppm         naphtha (petroleum), hydrotreated light (CAS 64742-49-0)       TWA       400 mg/m3         n-heptane (CAS 142-82-5)       Ceiling       1800 mg/m3 440 ppm         TWA       350 mg/m3 85 ppm         US. Workplace Environmental Exposure Level (WEEL) Guides Components       Type       Value         1,1-difluoroethane (CAS)       TWA       2700 mg/m3		TWA	· ·	
108-87-2)  naphtha (petroleum), hydrotreated light (CAS 64742-49-0)  TWA  100 ppm  100 ppm  100 ppm  1800 mg/m3  440 ppm  TWA  350 mg/m3  85 ppm  US. Workplace Environmental Exposure Level (WEEL) Guides Components  Type  Value  1,1-difluoroethane (CAS  TWA  2700 mg/m3				
TWA   A00 mg/m3		IWA		
hydrotreated light (CAS 64742-49-0)  100 ppm 100 ppm 1800 mg/m3 440 ppm TWA 350 mg/m3 85 ppm  US. Workplace Environmental Exposure Level (WEEL) Guides Components Type Value  1,1-difluoroethane (CAS TWA 2700 mg/m3			• •	
100 ppm n-heptane (CAS 142-82-5) Ceiling 1800 mg/m3 440 ppm TWA 350 mg/m3 85 ppm  US. Workplace Environmental Exposure Level (WEEL) Guides Components Type Value  1,1-difluoroethane (CAS TWA 2700 mg/m3	hydrotreated light (CAS	TWA	400 mg/m3	
TWA 350 mg/m3 85 ppm  US. Workplace Environmental Exposure Level (WEEL) Guides Components Type Value  1,1-difluoroethane (CAS TWA 2700 mg/m3	· · · · · · · · · · · · · · · · · · ·		100 ppm	
TWA 350 mg/m3 85 ppm  US. Workplace Environmental Exposure Level (WEEL) Guides Components Type Value  1,1-difluoroethane (CAS TWA 2700 mg/m3	n-heptane (CAS 142-82-5)	Ceiling	1800 mg/m3	
US. Workplace Environmental Exposure Level (WEEL) Guides Components Type Value  1,1-difluoroethane (CAS TWA 2700 mg/m3	·	-	<del>-</del>	
US. Workplace Environmental Exposure Level (WEEL) Guides Components Type Value  1,1-difluoroethane (CAS TWA 2700 mg/m3		TWA	350 mg/m3	
ComponentsTypeValue1,1-diffuoroethane (CASTWA2700 mg/m3			85 ppm	
1,1-difluoroethane (CAS TWA 2700 mg/m3			Value	
			2700 mg/m3	
1000 ppm			-	

**Biological limit values** 

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

# 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.

#### 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.

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**

Physical stateLiquid.FormAerosol.ColorColorless.

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 179.6 °F (82 °C) estimated

range

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 Not available.

(n-octanol/water)

**Auto-ignition temperature** 509 °F (265 °C) estimated

Decomposition temperature Not available.

Viscosity Not available.

Percent volatile 98.1 % estimated

# 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**No dangerous reaction known under conditions of normal use.

reactions

Material name: QD® Contact Cleaner

No. 02130 (Item# 1003218) Version #: 05 Revision date: 12-18-2018 Issue date: 09-29-2014

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** 

Carbon oxides.

products

# 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 Causes skin irritation.

Eye contact Direct contact with eyes may cause temporary irritation.

Ingestion 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

Aspiration may cause pulmonary edema and pneumonitis. May cause drowsiness and dizziness.

Headache. Nausea, vomiting. Skin irritation. May cause redness and pain.

toxicological characteristics

#### Information on toxicological effects

Acute toxicity May be fatal if swallowed and enters airways.

**Species Test Results** Components

2,2,4-trimethylpentane (CAS 540-84-1)

**Acute** 

Inhalation

Rat LC50 118 mg/l, 4 Hours

3-methylhexane (CAS 589-34-4)

**Acute Dermal** 

Rabbit LD50 > 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

Vapor

LC50 Rat > 73.5 mg/l, 4 hours

Material name: QD® Contact Cleaner

**Species Test Results** Components

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.

This product is not expected to cause skin sensitization. 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.

IARC Monographs. Overall Evaluation of Carcinogenicity

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

Not regulated.

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

Reproductive toxicity This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity -

single exposure

May cause drowsiness and dizziness.

Not classified.

Specific target organ toxicity repeated exposure

May be fatal if swallowed and enters airways. **Aspiration hazard** 

**Chronic effects** Prolonged inhalation may be harmful.

# 12. Ecological 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 3.61 methylcyclohexane n-heptane 4.66

**Bioconcentration factor (BCF)** 

10 - 25000 naphtha (petroleum), hydrotreated light

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.

# 13. Disposal considerations

**Disposal instructions** If discarded, this product is considered a RCRA ignitable waste, D001. 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 in accordance

with all applicable regulations.

D001: Waste Flammable material with a flash point <140 F Hazardous waste code

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.

# 14. Transport information

DOT

UN1950 **UN** number

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 provisionsN82Packaging exceptions306Packaging non bulkNonePackaging bulkNone

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 Allowed with restrictions.

aircraft

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.

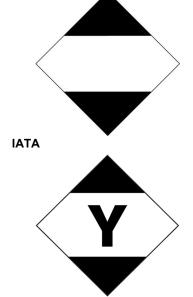
**Environmental hazards** 

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.

DOT; IMDG



Material name: QD® Contact Cleaner

SDS US

# 15. Regulatory information

US federal regulations

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication

Standard, 29 CFR 1910.1200.

#### TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

#### SARA 304 Emergency release notification

Not regulated.

## OSHA Specifically Regulated Substances (29 CFR 1910.1001-1052)

Not regulated.

#### **CERCLA Hazardous Substance List (40 CFR 302.4)**

2,2,4-trimethylpentane (CAS 540-84-1)

Listed.

#### **CERCLA Hazardous Substances: Reportable quantity**

2,2,4-trimethylpentane (CAS 540-84-1)

1000 LBS

Spills or releases resulting in the loss of any ingredient at or above its RQ require immediate notification to the National Response Center (800-424-8802) and to your Local Emergency Planning Committee.

#### Other federal regulations

#### Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

2,2,4-trimethylpentane (CAS 540-84-1)

#### Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

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

Safe Drinking Water Act

Not regulated.

(SDWA)

**Food and Drug** 

Not regulated.

Administration (FDA)

# Superfund Amendments and Reauthorization Act of 1986 (SARA)

Classified hazard

Flammable (gases, aerosols, liquids, or solids)

categories

Gas under pressure

Acute toxicity (any route of exposure)

Skin corrosion or irritation

Specific target organ toxicity (single or repeated exposure)

Aspiration hazard

Hazard not otherwise classified (HNOC)

#### SARA 302 Extremely hazardous substance

Not listed.

#### SARA 313 (TRI reporting)

Not regulated.

#### US state regulations

#### US. New Jersey Worker and Community Right-to-Know Act

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

2,2,4-trimethylpentane (CAS 540-84-1)

2,3-dimethylpentane (CAS 565-59-3)

3-methylhexane (CAS 589-34-4)

methylcyclohexane (CAS 108-87-2)

naphtha (petroleum), hydrotreated light (CAS 64742-49-0)

n-heptane (CAS 142-82-5)

## **US. Massachusetts RTK - Substance List**

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

2,2,4-trimethylpentane (CAS 540-84-1)

2,3-dimethylpentane (CAS 565-59-3)

2-methylhexane (CAS 591-76-4)

3-methylhexane (CAS 589-34-4)

methylcyclohexane (CAS 108-87-2) naphtha (petroleum), hydrotreated light (CAS 64742-49-0)

n-heptane (CAS 142-82-5)

## US. Pennsylvania Worker and Community Right-to-Know Law

2,2,4-trimethylpentane (CAS 540-84-1)

2,3-dimethylpentane (CAS 565-59-3)

2-methylhexane (CAS 591-76-4)

Material name: QD® Contact Cleaner

3,3-dimethylpentane (CAS 562-49-2)

3-methylhexane (CAS 589-34-4)

methylcyclohexane (CAS 108-87-2)

naphtha (petroleum), hydrotreated light (CAS 64742-49-0)

n-heptane (CAS 142-82-5)

#### **US. Rhode Island RTK**

2,2,4-trimethylpentane (CAS 540-84-1)

methylcyclohexane (CAS 108-87-2)

naphtha (petroleum), hydrotreated light (CAS 64742-49-0)

n-heptane (CAS 142-82-5)

#### **California Proposition 65**

California Safe Drinking Water and Toxic Enforcement Act of 2016 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins. For more information go to www.P65Warnings.ca.gov.

#### US. California. Candidate Chemicals List. Safer Consumer Products Regulations (Cal. Code Regs, tit. 22, 69502.3, subd. (a))

2,2,4-trimethylpentane (CAS 540-84-1)

naphtha (petroleum), hydrotreated light (CAS 64742-49-0)

#### Volatile organic compounds (VOC) regulations

#### **EPA**

VOC content (40 CFR

74.9 %

51.100(s))

**Consumer products** 

Not regulated

(40 CFR 59, Subpt. C)

State

This product is regulated as an Electronic Cleaner. This product is compliant for use in all 50 **Consumer products** 

states.

74.9 % VOC content (CA) VOC content (OTC) 74.9 %

#### 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	Yes

Substances (EINECS)

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

Yes

(PICCS)

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).

# 16. Other information, including date of preparation or last revision

09-29-2014 Issue date 12-18-2018 **Revision date** Prepared by Allison Yoon

Version #

**Further information** CRC # 1750971

Material name: QD® Contact Cleaner

SDS US

#### **Disclaimer**

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 Industries, Inc..

**Revision information** 

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