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SAFETY DATA SHEET

1. Identification

Product identifier CO® Contact Cleaner - 10 fl oz

Other means of identification

Product Code No. 02017 (Item# 1003174)

Recommended use Precision electronics 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 Not classified.
Health hazards Not classified.
Environmental hazards Not classified.
OSHA defined hazards Not classified.

Label elements

Hazard symbol None.
Signal word None.

Hazard statement The mixture does not meet the criteria for classification.

Precautionary statement

Prevention Observe good industrial hygiene practices. 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.

Response Wash hands after handling.

Storage Store away from incompatible materials.

Disposal Dispose of waste and residues in accordance with local authority requirements.

Hazard(s) not otherwise

classified (HNOC)

None known.

Supplemental information When exposed to extreme heat or hot surfaces, vapors may decompose to harmful or fatal

corrosive gases such as hydrogen fluoride.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
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

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

Material name: CO® Contact Cleaner - 10 fl oz

4. First-aid measures

Inhalation Move to fresh air. Call a physician if symptoms develop or 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.

IngestionRinse mouth. Get medical attention if symptoms occur.Most importantDirect contact with eyes may cause temporary irritation.

symptoms/effects, acute and

delayed

of immediate Treat symptomatically.

Indication of immediate medical attention and special treatment needed

treatment needed
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 Unsuitable extinguishing

media

Specific hazards arising from the chemical

Special protective equipment and precautions for firefighters

Fire-fighting equipment/instructions

Water fog. Foam. Dry chemical powder. Carbon dioxide (CO2).

Do not use water jet as an extinguisher, as this will spread the fire.

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.

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

Move containers from fire area if you can do so without risk.

General fire hazards No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Methods and materials for containment and cleaning up

Environmental precautions

Keep people away from and upwind of spill/leak. Keep out of low areas. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.

Stop the flow of material, if this is without risk. Prevent entry into waterways, sewer, basements or confined areas. Following product recovery, flush area with water.

Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling Conditions for safe storage, including any incompatibilities Observe good industrial hygiene practices. For product usage instructions, see the product label. Level 1 Aerosol.

Store away from incompatible materials.

8. Exposure controls/personal protection

Occupational exposure limits

US. Workplace Environmental Exposure Level (WEEL) Guides

Components	Туре	Value	
decafluoropentane (CAS 138495-42-8)	STEL	7217 mg/m3	
		700 ppm	
	TWA	2320 mg/m3	
		225 ppm	
methyl nonafluorobutyl ether (CAS 163702-07-6)	TWA	750 ppm	
methyl nonafluoroisobutyl ether (CAS 163702-08-7)	TWA	750 ppm	

Biological limit valuesNo biological exposure limits noted for the ingredient(s).

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Appropriate engineering

controls

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

Individual protection measures, such as personal protective equipment

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

Skin protection

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

Wear appropriate chemical resistant clothing. Other

If engineering controls are not feasible or if exposure exceeds the applicable exposure limits, use a Respiratory protection

> 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

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 state Liquid. **Form** Liquid.

Color Clear, Colorless.

Ethereal and sweetish odor. Odor

Odor threshold Not available. рH Not available.

Melting point/freezing point -211 °F (-135 °C) estimated Initial boiling point and boiling 131 °F (55 °C) estimated

range

None (Tag Closed Cup) Flash point

Evaporation rate Very fast. Flammability (solid, gas) Not available. Upper/lower flammability or explosive limits

Flammability limit - lower

(%)

Not applicable.

Flammability limit - upper

(%)

Not applicable.

Vapor pressure 291.2 hPa estimated

> 1 (air = 1) Vapor density Relative density 1.58

Solubility(ies)

Solubility (water) < 140 ppm Not available. Partition coefficient

(n-octanol/water)

761 °F (405 °C) estimated **Auto-ignition temperature**

Decomposition temperature Not available. **Viscosity** Not available. Percent volatile 100 % 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

reactions

No dangerous reaction known under conditions of normal use.

Material name: CO® Contact Cleaner - 10 fl oz No. 02017 (Item# 1003174) Version #: 01 Issue date: 01-11-2022 Conditions to avoid Contact with incompatible materials. When exposed to extreme heat or hot surfaces, vapors may

decompose to harmful or fatal corrosive gases such as hydrogen fluoride.

Incompatible materials

Hazardous decomposition

Strong oxidizing agents.

products

Hydrogen fluoride.

11. Toxicological information

Information on likely routes of exposure

Inhalation Prolonged inhalation may be harmful.

Skin contact Prolonged skin contact may cause temporary irritation. Eve contact Direct contact with eyes may cause temporary irritation.

Ingestion Expected to be a low ingestion hazard.

Symptoms related to the physical, chemical and toxicological characteristics Direct contact with eyes may cause temporary irritation.

Information on toxicological effects

Not classified. Acute toxicity

Prolonged skin contact may cause temporary irritation. Skin corrosion/irritation Serious eye damage/eye Direct contact with eyes may cause temporary irritation.

irritation

Respiratory or skin sensitization

Respiratory sensitization This product is not expected to cause respiratory sensitization.

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.

This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA. Carcinogenicity

IARC Monographs. Overall Evaluation of Carcinogenicity

Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

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

Specific target organ toxicity -

single exposure

Not classified.

Specific target organ toxicity -

repeated exposure

Not classified.

Aspiration hazard Not an aspiration hazard.

Chronic effects Prolonged inhalation may be harmful.

12. Ecological information

Ecotoxicity The product is not classified as environmentally hazardous. However, this does not exclude the

possibility that large or frequent spills can have a harmful or damaging effect on the environment.

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

No data available. **Bioaccumulative potential** 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

This product is not a RCRA hazardous waste (See 40 CFR Part 261.20 – 261.33). Empty Disposal instructions

containers may be recycled.

Hazardous waste code Not regulated.

Contaminated packaging Do not re-use empty containers.

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14. Transport information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

15. Regulatory information

US federal regulations

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

decafluoropentane (CAS 138495-42-8)

1.0 % One-Time Export Notification only.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1053)

Not listed.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

CERCLA Hazardous Substances: Reportable quantity

Not listed.

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

Not regulated.

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

Not regulated.

Safe Drinking Water Act

Not regulated.

(SDWA)

Food and Drug

Not regulated.

Administration (FDA)

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Nο

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous

chemical

SARA 313 (TRI reporting)

Not regulated.

US state regulations

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

Not listed.

US. Massachusetts RTK - Substance List

Not listed.

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

Not listed.

US. Rhode Island RTK

Not listed.

California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (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.

Volatile organic compounds (VOC) regulations

EPA

VOC content (40 CFR 0 % **51.100(s))**

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Consumer products (40 CFR 59, Subpt. C)

Not regulated

Inventory name

State

This product is regulated as an Electronic Cleaner. This product is not compliant to be sold for use **Consumer products**

in California. This product is compliant in all other states.

100 % VOC content (CA) VOC content (OTC) 0 %

International Inventories

Taiwan

Disclaimer

Country(s) or region

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Australia	Australian Inventory of Industrial Chemicals (AICIS)	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

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)

Taiwan Chemical Substance Inventory (TCSI)

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

01-11-2022 Issue date Prepared by Danica Fulmer

Version #

Further information CRC # 508C-D/1002503-1008115

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 Product and Company Identification: Product Codes

Hazard(s) identification: Prevention

Composition / Information on Ingredients: Ingredients

Composition/information on ingredients: Component information

Handling and storage: Precautions for safe handling Physical & Chemical Properties: Multiple Properties Toxicological Information: Toxicological Data

Ecological Information: Ecotoxicity

Regulatory information: California Proposition 65

Other information, including date of preparation or last revision: Disclaimer

Other information, including date of preparation or last revision: Further information

GHS: Classification

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On inventory (yes/no)*

Yes

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).