

# Safety Data Sheet

acc. to OSHA HCS

Printing date 10/18/2013

Reviewed on 10/02/2013

## 1 Identification

- **Product identifier**
- **Trade name: Rawn EnviroSafe Contact Cleaner, Aerosol**
- **Relevant identified uses of the substance or mixture and uses advised against**  
No further relevant information available.
- **Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**  
Cortec Corporation  
4119 White Bear Parkway  
St. Paul, MN 55110 USA  
Phone (651) 429-1100  
Fax (651) 429-1122
- **Information department:**  
info@cortecvci.com  
Product safety department.
- **Emergency telephone number:**  
Spill, Leak, Fire, Exposure, or Accident  
24 hour CHEMTREC contact:  
USA and Canada 1-800-424-9300  
International +1 703-527-3887 (collect calls accepted)

## 2 Hazard(s) identification

- **Classification of the substance or mixture**



GHS07

- H332 Harmful if inhaled.
- H315 Causes skin irritation.
- H319 Causes serious eye irritation.

- **Classification according to Directive 67/548/EEC or Directive 1999/45/EC**



Harmful

Harmful by inhalation.



Irritant

Irritating to eyes and skin.

- **Information concerning particular hazards for human and environment:**

The product has to be labelled due to the calculation procedure of the "General Classification guideline for preparations of the EU" in the latest valid version.

Warning! Pressurized container.

- **Label elements**

- **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).
- **Hazard pictograms** GHS07
- **Signal word** Warning

- **Hazard-determining components of labeling:**

3,3-Dichloro-1,1,1,2,2-pentafluoropropane  
1,3,-Dichloro-1,1,2,2,3-pentafluoropropane

- **Hazard statements**

Harmful if inhaled.  
Causes skin irritation.

(Contd. on page 2)

USA

# Safety Data Sheet

## acc. to OSHA HCS

Printing date 10/18/2013

Reviewed on 10/02/2013

**Trade name: Rawn EnviroSafe Contact Cleaner, Aerosol**

(Contd. of page 1)

Causes serious eye irritation.

- **Precautionary statements**

Avoid breathing dust/fume/gas/mist/vapours/spray.

Wear protective gloves/protective clothing/eye protection/face protection.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

Specific treatment (see on this label).

Take off contaminated clothing and wash before reuse.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

- **Classification system**

- **NFPA ratings (scale 0-4)**



Health = 2

Fire = 2

Reactivity = 1

- **HMIS rating system (0-4)**

HEALTH	2	Health = 2
FIRE	2	Flammability = 2
REACTIVITY	1	Reactivity = 1

- **Other hazards**

- **Results of PBT and vPvB assessment**

- **PBT:** Not applicable.

- **vPvB:** Not applicable.

### 3 Composition/information on ingredients

- **Chemical characterization: Mixtures**

- **Description:** Mixture of the substances listed below with nonhazardous additions.

- **Dangerous components:**

CAS: 406-58-6 ELINCS: 430-250-1	1,1,1,3,3-pentafluorobutane F R11 H224	25-50%
CAS: 422-56-0 EINECS: 207-016-9	3,3-Dichloro-1,1,1,2,2-pentafluoropropane Xn R20;  Xi R36/38 H332; H315; H319	25-50%
CAS: 67-63-0 EINECS: 200-661-7	propan-2-ol Xi R36;  F R11 R67 H225;  H319; H336	2.5-10%
CAS: 507-55-1 EINECS: 208-076-9	1,3,-Dichloro-1,1,2,2,3-pentafluoropropane Xn R20;  Xi R36/38 H332; H315; H319	2.5-10%

- **Additional information** For the wording of the listed risk phrases refer to section 16.

USA

(Contd. on page 3)

# Safety Data Sheet

acc. to OSHA HCS

Printing date 10/18/2013

Reviewed on 10/02/2013

**Trade name: Rawn EnviroSafe Contact Cleaner, Aerosol**

(Contd. of page 2)

## 4 First-aid measures

- **Description of first aid measures**
- **General information**  
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
- **After inhalation**  
Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist. In case of unconsciousness place patient stably on side position for transportation.
- **After skin contact** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact**  
Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.
- **After swallowing** If symptoms persist consult doctor.
- **Information for doctor**
- **Most important symptoms and effects, both acute and delayed** No further relevant information available.
- **Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

## 5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents**  
CO<sub>2</sub>, extinguishing powder or water spray. Fight larger fires with water spray or alcohol resistant foam.
- **Special hazards arising from the substance or mixture**  
During heating or in case of fire poisonous gases are produced.
- **Advice for firefighters**
- **Protective equipment:** Mount respiratory protective device.

## 6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**  
Mount respiratory protective device.



Wear protective equipment. Keep unprotected persons away.

- **Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **Methods and material for containment and cleaning up:**  
Dispose contaminated material as waste according to item 13.  
Ensure adequate ventilation.
- **Reference to other sections**  
See Section 7 for information on safe handling  
See Section 8 for information on personal protection equipment.  
See Section 13 for disposal information.

## 7 Handling and storage

- **Handling**
- **Precautions for safe handling** Ensure good ventilation/exhaustion at the workplace.

(Contd. on page 4)

USA

# Safety Data Sheet

## acc. to OSHA HCS

Printing date 10/18/2013

Reviewed on 10/02/2013

**Trade name: Rawn EnviroSafe Contact Cleaner, Aerosol**

(Contd. of page 3)

- **Information about protection against explosions and fires:**

Do not spray on a naked flame or any incandescent material.



Keep ignition sources away - Do not smoke.

Keep respiratory protective device available.

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50 °C, i.e. electric lights. Do not pierce or burn, even after use.

- **Conditions for safe storage, including any incompatibilities**

- **Storage**

- **Requirements to be met by storerooms and receptacles:**

Observe official regulations on storing packagings with pressurized containers.

- **Information about storage in one common storage facility:** Not required.

- **Further information about storage conditions:** Keep receptacle tightly sealed.

- **Specific end use(s)** No further relevant information available.

## 8 Exposure controls/personal protection

- **Additional information about design of technical systems:** No further data; see item 7.

- **Control parameters**

- **Components with limit values that require monitoring at the workplace:**

**1,1,1,2-Tetrafluoroethane (25-50%)**

WEEL Long-term value: 1000 ppm

**67-63-0 propan-2-ol (2.5-10%)**

PEL Long-term value: 980 mg/m<sup>3</sup>, 400 ppm

REL Short-term value: 1225 mg/m<sup>3</sup>, 500 ppm

Long-term value: 980 mg/m<sup>3</sup>, 400 ppm

TLV Short-term value: 984 mg/m<sup>3</sup>, 400 ppm

Long-term value: 492 mg/m<sup>3</sup>, 200 ppm

BEI

- **Ingredients with biological limit values:**

**67-63-0 propan-2-ol (2.5-10%)**

BEI 40 mg/L

Medium: urine

Time: end of shift at end of workweek

Parameter: Acetone (background, nonspecific)

- **Additional information:** The lists that were valid during the creation were used as basis.

- **Exposure controls**

- **Personal protective equipment**

- **General protective and hygienic measures**

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Avoid contact with the eyes and skin.

(Contd. on page 5)

USA

# Safety Data Sheet

## acc. to OSHA HCS

Printing date 10/18/2013

Reviewed on 10/02/2013

**Trade name: Rawn EnviroSafe Contact Cleaner, Aerosol**

(Contd. of page 4)

· **Breathing equipment:**



In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.

· **Protection of hands:**

Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **Eye protection:** Tightly sealed goggles.

· **Body protection:** Protective work clothing.

## 9 Physical and chemical properties

· **Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

· <b>Form:</b>	Aerosol
· <b>Color:</b>	White
· <b>Odor:</b>	Characteristic
· <b>Odour threshold:</b>	Not determined.

· **pH-value:** Not determined.

· **Change in condition**

· <b>Melting point/Melting range:</b>	undetermined
· <b>Boiling point/Boiling range:</b>	82 °C (180 °F)

· **Flash point:** > 55 °C (> 131 °F)

· **Flammability (solid, gaseous)** Not applicable.

· **Ignition temperature:** 425 °C (797 °F)

· **Decomposition temperature:** Not determined.

· **Auto igniting:** Product is not selfigniting.

· **Danger of explosion:** Product does not present an explosion hazard.

· **Explosion limits:**

· <b>Lower:</b>	2.0 Vol %
· <b>Upper:</b>	12.0 Vol %

· **Vapor pressure at 20 °C (68 °F):** 5716 hPa (4287 mm Hg)

· **Density at 20 °C (68 °F):** 1.25 g/cm<sup>3</sup> (10.431 lbs/gal)

· **Relative density** Not determined.

· **Vapour density** Not determined.

· **Evaporation rate** Not applicable.

· **Solubility in / Miscibility with**

· **Water:** Not miscible or difficult to mix

(Contd. on page 6)

# Safety Data Sheet

## acc. to OSHA HCS

Printing date 10/18/2013

Reviewed on 10/02/2013

**Trade name: Rawn EnviroSafe Contact Cleaner, Aerosol**

(Contd. of page 5)

- |   |  |
|---|--|
| <b>· Partition coefficient (n-octanol/water):</b> | Not determined.  |
| <b>· Viscosity:</b>                               |  |
| <b>dynamic:</b>                                   | Not determined.  |
| <b>kinematic:</b>                                 | Not determined.  |
| <b>· Solvent content:</b>                         |  |
| <b>Organic solvents:</b>                          | 10.0 %   |
| <b>· Solids content:</b>                          | 42.9 %   |
| <b>· Other information</b>                        | Dielectric Constant (1MHz,25C): 4.14<br>Dielectric Breakdown: 43 kV, according to ASTM D-877<br>The above data are typical values and do not constitute a specification. |

### 10 Stability and reactivity

- **Reactivity**
- **Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Possibility of hazardous reactions** No dangerous reactions known
- **Conditions to avoid** No further relevant information available.
- **Incompatible materials:** No further relevant information available.
- **Hazardous decomposition products:** No dangerous decomposition products known

### 11 Toxicological information

- **Information on toxicological effects**
- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** Irritant to skin and mucous membranes.
- **on the eye:** Irritating effect.
- **Sensitization:** No sensitizing effects known.
- **Additional toxicological information:**  
The product shows the following dangers according to the calculation method of the General EU Classification Guidelines for Preparations as issued in the latest version:  
Harmful  
Irritant

- **Carcinogenic categories**

- **IARC (International Agency for Research on Cancer)**

67-63-0 | propan-2-ol

3

- **NTP (National Toxicology Program)**

None of the ingredients is listed.

### 12 Ecological information

- **Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **Persistence and degradability** No further relevant information available.

(Contd. on page 7)

USA

# Safety Data Sheet

## acc. to OSHA HCS

Printing date 10/18/2013

Reviewed on 10/02/2013

**Trade name: Rawn EnviroSafe Contact Cleaner, Aerosol**

(Contd. of page 6)

- **Behavior in environmental systems:**
- **Bioaccumulative potential** No further relevant information available.
- **Mobility in soil** No further relevant information available.
- **Additional ecological information:**
- **General notes:**  
Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water.  
Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
- **Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **Other adverse effects** No further relevant information available.

### 13 Disposal considerations

- **Waste treatment methods**
- **Recommendation**



Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.

### 14 Transport information

- |                                  |                         |
|----------------------------------|-------------------------|
| <b>· UN-Number</b>               |                         |
| <b>· DOT, ADR, IMDG, IATA</b>    | UN1950                  |
| <b>· UN proper shipping name</b> |                         |
| <b>· DOT</b>                     | Aerosols, non-flammable |
| <b>· ADR</b>                     | 1950 Aerosols           |
| <b>· IMDG, IATA</b>              | AEROSOLS                |

- **Transport hazard class(es)**

- **DOT**



- |                |     |
|----------------|-----|
| <b>· Class</b> | 2.2 |
| <b>· Label</b> | 2.2 |

- **ADR**



- |                |        |
|----------------|--------|
| <b>· Class</b> | 2.2 5A |
|----------------|--------|

(Contd. on page 8)

USA

# Safety Data Sheet

acc. to OSHA HCS

Printing date 10/18/2013

Reviewed on 10/02/2013

Trade name: Rawn EnviroSafe Contact Cleaner, Aerosol

(Contd. of page 7)

· Label 2.2

· IMDG



· Class 2.2

· Label 2.2

· IATA



· Class 2.2

· Label 2.2

· Packing group

· IMDG, IATA Void

· Environmental hazards:

· Marine pollutant: No

· Special precautions for user Not applicable.

· Poison inhalation hazard: No

· EMS Number: F-D,S-U

· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not applicable.

· UN "Model Regulation": UN1950, Aerosols, 2.2

## 15 Regulatory information

· Safety, health and environmental regulations/legislation specific for the substance or mixture

· SARA Section 355 (extremely hazardous substances)

None of the ingredients is listed.

· SARA Section 313 (specific toxic chemical listings)

422-56-0 3,3-Dichloro-1,1,1,2,2-pentafluoropropane

67-63-0 propan-2-ol

507-55-1 1,3,-Dichloro-1,1,2,2,3-pentafluoropropane

· TSCA (Toxic Substances Control Act)

All ingredients are listed.

· Prop 65 - Chemicals known to cause cancer

None of the ingredients is listed.

· Cancerogenity categories

· EPA (Environmental Protection Agency)

None of the ingredients is listed.

(Contd. on page 9)

USA



# Safety Data Sheet

## acc. to OSHA HCS

Printing date 10/18/2013

Reviewed on 10/02/2013

**Trade name: Rawn EnviroSafe Contact Cleaner, Aerosol**

(Contd. of page 8)

· **NIOSH-Ca (National Institute for Occupational Safety and Health)**

None of the ingredients is listed.

· **OSHA-Ca (Occupational Safety & Health Administration)**

None of the ingredients is listed.

· **GHS label elements** The product is classified and labeled according to the Globally Harmonized System (GHS).

· **Hazard pictograms** GHS07

· **Signal word** Warning

· **Hazard-determining components of labeling:**

3,3-Dichloro-1,1,1,2,2-pentafluoropropane

1,3,-Dichloro-1,1,2,2,3-pentafluoropropane

· **Hazard statements**

Harmful if inhaled.

Causes skin irritation.

Causes serious eye irritation.

· **Precautionary statements**

Avoid breathing dust/fume/gas/mist/vapours/spray.

Wear protective gloves/protective clothing/eye protection/face protection.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

Specific treatment (see on this label).

Take off contaminated clothing and wash before reuse.

IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

· **National regulations**

· **Technical instructions (air):**

Class	Share in %
NK	10.0

· **Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

## 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Cortec Corporation does not warranty any translation of this SDS not created by Cortec Corporation.

· **Abbreviations and acronyms:**

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

DOT: US Department of Transportation

IATA: International Air Transport Association

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

NFPA: National Fire Protection Association (USA)

HMIS: Hazardous Materials Identification System (USA)

· **\* Data compared to the previous version altered.**