

Safety Data Sheet

acc. to OSHA HCS

Printing date 12/03/2015

Reviewed on 12/03/2015

1 Identification

- **Product identifier**
- **Trade name:** Rawn Universal Contact Cleaner (Aerosol)
- **Relevant identified uses of the substance or mixture and uses advised against**
No further relevant information available.
- **Application of the substance / the mixture** Contact Cleaner
- **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:** regulatory@cortecvci.com
- **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**



GHS02 GHS04 Flame, Gas cylinder

Flam. Aerosol 1 H222-H229 Extremely flammable aerosol. Pressurized container: May burst if heated.



GHS08 Health hazard

Carc. 1A	H350	May cause cancer.
Repr. 2	H361	Suspected of damaging fertility or the unborn child.
Asp. Tox. 1	H304	May be fatal if swallowed and enters airways.

- **Label elements**

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

- **Hazard pictograms**



GHS02 GHS04 GHS08

- **Signal word** Danger

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

Naphtha (petroleum), isomerization
ethanol
n-hexane

- **Hazard statements**

Extremely flammable aerosol. Pressurized container: May burst if heated.
May cause cancer.
Suspected of damaging fertility or the unborn child.

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May be fatal if swallowed and enters airways.

- **Precautionary statements**

Keep away from heat/sparks/open flames/hot surfaces. No smoking.

IF SWALLOWED: Immediately call a POISON CENTER/ doctor.

Store locked up.

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

- **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: 64741-70-4 EINECS: 265-073-5	Naphtha (petroleum), isomerization ⚠ Asp. Tox. 1, H304	50-100%
CAS: 64-17-5 EINECS: 200-578-6	ethanol ⚠ Flam. Liq. 2, H225; ⚠ Carc. 1A, H350	2,5-10%
CAS: 64742-49-0 EINECS: 265-151-9	Naphtha (petroleum), hydrotreated light (Nota P <0.1% benzene) ⚠ Asp. Tox. 1, H304	2,5-10%
CAS: 124-38-9 EINECS: 204-696-9	carbon dioxide ⚠ Press. Gas, H280	2,5-10%
CAS: 110-54-3 EINECS: 203-777-6	n-hexane ⚠ Flam. Liq. 2, H225; ⚠ Repr. 2, H361; STOT RE 2, H373; Asp. Tox. 1, H304; ⚠ Skin Irrit. 2, H315; STOT SE 3, H336	≤ 2,5%
CAS: 108-10-1 EINECS: 203-550-1	4-methylpentan-2-one ⚠ Flam. Liq. 2, H225; ⚠ Carc. 2, H351; ⚠ Acute Tox. 4, H332; Eye Irrit. 2A, H319; STOT SE 3, H335	≤ 2,5%

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

4 First-aid measures

- **Description of first aid measures**

- **After inhalation** Supply fresh air; consult doctor in case of complaints.

- **After skin contact** Immediately wash with water and soap and rinse thoroughly.

- **After eye contact** Rinse opened eye for several minutes under running water.

- **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.

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5 Fire-fighting measures

- **Extinguishing media**
- **Suitable extinguishing agents**



CO₂, sand, extinguishing powder. Do not use water.

- **For safety reasons unsuitable extinguishing agents**
Water.
Water with full jet.
- **Special hazards arising from the substance or mixture** No further relevant information available.

6 Accidental release measures

- **Personal precautions, protective equipment and emergency procedures**



Wear protective equipment. Keep unprotected persons away.

Ensure adequate ventilation

Keep away from ignition sources

- **Environmental precautions:** Inform respective authorities in case of seepage into water course or sewage system.
- **Methods and material for containment and cleaning up:**
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
Do not flush with water or aqueous cleansing agents
- **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.
Open and handle receptacle with care.
- **Information about protection against explosions and fires:**



Keep ignition sources away - Do not smoke.

Protect against electrostatic charges.

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.

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

Use explosion-proof apparatus / fittings and spark-proof tools.

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- **Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and receptacles:**
 Store in a cool location.
 Store only in the original receptacle.
 Observe official regulations on storing packagings with pressurized containers.
- **Information about storage in one common storage facility:**
 Store away from foodstuffs.
 Store away from oxidizing agents.
- **Further information about storage conditions:**
 Keep receptacle tightly sealed.
 Do not gas tight seal receptacle.
 Store in cool, dry conditions in well sealed receptacles.
 Protect from heat and direct sunlight.
- **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:
64-17-5 ethanol (2.5-10%)

PEL (USA)	Long-term value: 1900 mg/m ³ , 1000 ppm
REL (USA)	Long-term value: 1900 mg/m ³ , 1000 ppm
TLV (USA)	Short-term value: 1880 mg/m ³ , 1000 ppm

124-38-9 carbon dioxide (2.5-10%)

PEL (USA)	Long-term value: 9000 mg/m ³ , 5000 ppm
REL (USA)	Short-term value: 54,000 mg/m ³ , 30,000 ppm Long-term value: 9000 mg/m ³ , 5000 ppm
TLV (USA)	Short-term value: 54,000 mg/m ³ , 30,000 ppm Long-term value: 9000 mg/m ³ , 5000 ppm

110-54-3 n-hexane (≤ 2.5%)

PEL (USA)	Long-term value: 1800 mg/m ³ , 500 ppm
REL (USA)	Long-term value: 180 mg/m ³ , 50 ppm
TLV (USA)	Long-term value: 176 mg/m ³ , 50 ppm Skin; BEI

67-56-1 methanol (≤ 2.5%)

PEL (USA)	Long-term value: 260 mg/m ³ , 200 ppm
REL (USA)	Short-term value: 325 mg/m ³ , 250 ppm Long-term value: 260 mg/m ³ , 200 ppm Skin
TLV (USA)	Short-term value: 328 mg/m ³ , 250 ppm Long-term value: 262 mg/m ³ , 200 ppm Skin; BEI

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· Ingredients with biological limit values:
110-54-3 n-hexane ($\leq 2.5\%$)

BEI (USA)	0.4 mg/L
	Medium: urine
	Time: end of shift at end of workweek
	Parameter: 2,5-Hexanedione without hydrolysis

67-56-1 methanol ($\leq 2.5\%$)

BEI (USA)	15 mg/L
	Medium: urine
	Time: end of shift
	Parameter: Methanol (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.
- Store protective clothing separately.

· **Breathing equipment:**



Use suitable respiratory protective device in case of insufficient ventilation.

· **Protection of hands:**

- Protective gloves
- I.E., Nitrile, Viton, Neoprene
- 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:**

Form:	Aerosol
Color:	Colorless
Odor:	Characteristic
Odor threshold:	Not determined.

· **pH-value:** Not determined.

· **Change in condition**

Melting point/Melting range:	undetermined
Boiling point/Boiling range:	Not applicable, as aerosol

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· Flash point:	Not applicable, as aerosol
· Flammability (solid, gaseous)	Not applicable.
· Ignition temperature:	300 °C (572 °F) (*)
· Decomposition temperature:	Not determined.
· Auto igniting:	Product is not selfigniting.
· Danger of explosion:	Not determined.
· Explosion limits:	
Lower:	1.2 Vol % (*)
Upper:	7.0 Vol % (*)
· Vapor pressure at 20 °C (68 °F):	339 hPa (254 mm Hg) (*)
· Density at 20 °C (68 °F):	0.660-0.684 g/cm ³ (5.508-5.708 lbs/gal)
· Relative density	Not determined.
· Vapor density	Not determined.
· Evaporation rate	Not applicable.
· Solubility in / Miscibility with Water:	Not miscible or difficult to mix
· Partition coefficient (n-octanol/water):	Not determined.
· Viscosity:	
dynamic:	Not determined.
kinematic:	Not determined.
· Other information	The above data are typical values and do not constitute a specification. *Properties have been calculated.

10 Stability and reactivity

- **Reactivity** No further relevant information available.
- **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:**

· **LD/LC50 values that are relevant for classification:**

64-17-5 ethanol

Oral	LD50	7060 mg/kg (rat)
Inhalative	LC50/4 h	20000 mg/l (rat)

110-82-7 cyclohexane

Oral	LD50	12705 mg/kg (rat)
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Trade name: Rawn Universal Contact Cleaner (Aerosol)

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108-10-1 4-methylpentan-2-one

Oral	LD50	2100 mg/kg (rat)
Dermal	LD50	16000 mg/kg (rab)
Inhalative	LC50/4 h	8.3-16.6 mg/l (rat)

· Primary irritant effect:
· on the skin: Harmful in contact with skin.

· on the eye: May be irritating.

· 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:

Carcinogenic

The product can cause inheritable damage.

· Carcinogenic categories
· IARC (International Agency for Research on Cancer)

64-17-5	ethanol	1
108-10-1	4-methylpentan-2-one	2B

· NTP (National Toxicology Program)

None of the ingredients is listed.

· OSHA-Ca (Occupational Safety & Health Administration)

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.

· Behavior in environmental systems:
· Bioaccumulative potential No further relevant information available.

· Mobility in soil No further relevant information available.

· Ecotoxicological effects:
· Remark: Harmful to fish

· Additional ecological information:
· General notes: Harmful to aquatic organisms

· 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.

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

14 Transport information

- **UN-Number**
 - **DOT, IMDG, IATA**
 - **ADR**
- UN1950
UN1950
Not applicable

- **UN proper shipping name**
 - **DOT, IATA**
 - **ADR**
 - **IMDG**
- Aerosols, flammable
1950 Aerosols
AEROSOLS (HEXANES, CYCLOHEXANE), MARINE POLLUTANT

- **Transport hazard class(es)**

- **DOT**



- **Class**
 - **Label**
- 2.1
2.1

- **ADR**



- **Class**
 - **Label**
- 2.1 5F
2.1

- **IMDG**



- **Class**
 - **Label**
- 2.1
2.1

- **IATA**



- **Class**
 - **Label**
- 2.1
2.1

- **Packing group**
 - **DOT, ADR, IMDG, IATA**
- Void

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Trade name: Rawn Universal Contact Cleaner (Aerosol)

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· Environmental hazards:	Product contains environmentally hazardous substances: cyclohexane, ethanol
· Marine pollutant:	Yes
· Special marking (ADR):	Symbol (fish and tree) Symbol (fish and tree)
· Special precautions for user	Not applicable.
· Danger code (Kemler):	-
· EMS Number:	F-D,S-U
· Stowage Code	SW1 Protected from sources of heat. SW22 For AEROSOLS with a maximum capacity of 1 litre: Category A. For AEROSOLS with a capacity above 1 litre: Category B. For WASTE AEROSOLS: Category C, Clear of living quarters.
· Segregation Code	SG69 For AEROSOLS with a maximum capacity of 1 litre: Segregation as for class 9. Stow "separated from" class 1 except for division 1.4. For AEROSOLS with a capacity above 1 litre: Segregation as for the appropriate subdivision of class 2. For WASTE AEROSOLS: Segregation as for the appropriate subdivision of class 2.
· Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code	Not applicable.
· Transport/Additional information:	
· ADR	
· Excepted quantities (EQ)	Code: E0 Not permitted as Excepted Quantity
· IMDG	
· Limited quantities (LQ)	1L
· Excepted quantities (EQ)	Code: E0 Not permitted as Excepted Quantity
· UN "Model Regulation":	UN 1950 AEROSOLS, 2.1

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)**

110-54-3 n-hexane

67-56-1 methanol

110-82-7 cyclohexane

108-10-1 4-methylpentan-2-one

· **TSCA (Toxic Substances Control Act) (Substances not listed)**

All ingredients are listed.

· **Prop 65 - Chemicals known to cause cancer**

108-10-1 4-methylpentan-2-one

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· Cancerogenity categories
· EPA (Environmental Protection Agency)

110-54-3	n-hexane	II
110-82-7	cyclohexane	I
108-10-1	4-methylpentan-2-one	I

· TLV (Threshold Limit Value established by ACGIH)

64-17-5	ethanol	A3
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· MAK (German Maximum Workplace Concentration)

64-17-5	ethanol	5
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· NIOSH-Ca (National Institute for Occupational Safety and Health)

None of the ingredients is listed.

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

· Hazard pictograms


GHS02 GHS04 GHS08

· Signal word Danger

· Hazard-determining components of labeling:

Naphtha (petroleum), isomerization

ethanol

n-hexane

· Hazard statements

Extremely flammable aerosol. Pressurized container: May burst if heated.

May cause cancer.

Suspected of damaging fertility or the unborn child.

May be fatal if swallowed and enters airways.

· Precautionary statements

Keep away from heat/sparks/open flames/hot surfaces. No smoking.

IF SWALLOWED: Immediately call a POISON CENTER/ doctor.

Store locked up.

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

· National regulations
· Information about limitation of use:

Workers are not allowed to be exposed to the hazardous carcinogenic materials contained in this preparation.

Exceptions can be made by the authorities in certain cases.

· Technical instructions (air):

Class	Share in %
I	2.9
III	6.6
NK	8.6

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

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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.

- **Relevant phrases**

H225 Highly flammable liquid and vapor.

H280 Contains gas under pressure; may explode if heated.

H304 May be fatal if swallowed and enters airways.

H315 Causes skin irritation.

H319 Causes serious eye irritation.

H332 Harmful if inhaled.

H335 May cause respiratory irritation.

H336 May cause drowsiness or dizziness.

H350 May cause cancer.

H351 Suspected of causing cancer.

H361 Suspected of damaging fertility or the unborn child.

H373 May cause damage to organs through prolonged or repeated exposure.

- **Date of preparation / last revision** 12/03/2015 / -

- **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

ACGIH: American Conference of Governmental Industrial Hygienists

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)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

NIOSH: National Institute for Occupational Safety

OSHA: Occupational Safety & Health

Flam. Aerosol 1: Flammable aerosols, Hazard Category 1

Press. Gas: Gases under pressure: Liquefied gas

Flam. Liq. 2: Flammable liquids, Hazard Category 2

Acute Tox. 4: Acute toxicity, Hazard Category 4

Skin Irrit. 2: Skin corrosion/irritation, Hazard Category 2

Eye Irrit. 2A: Serious eye damage/eye irritation, Hazard Category 2A

Carc. 1A: Carcinogenicity, Hazard Category 1A

Carc. 2: Carcinogenicity, Hazard Category 2

Repr. 2: Reproductive toxicity, Hazard Category 2

STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3

STOT RE 2: Specific target organ toxicity - Repeated exposure, Hazard Category 2

Asp. Tox. 1: Aspiration hazard, Hazard Category 1

- *** Data compared to the previous version altered.**