

# Safety data sheet

## according to 1907/2006/EC, Article 31

Printing date 29.05.2015

Revision: 29.05.2015

### SECTION 1: Identification of the substance/mixture and of the company/undertaking

- **1.1 Product identifier**
- **Trade name: Cleaner Lube III**
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**  
No further relevant information available.
- **Application of the substance / the mixture**  
Cleaning agent/ Cleaner  
Lubricant
- **1.3 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
- **1.4 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)  
UK +(44)-870-8200418

### SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**



GHS02 flame

Flam. Aerosol 2 H223-H229 Flammable aerosol. Pressurised container: May burst if heated.



GHS07

Skin Irrit. 2	H315	Causes skin irritation.
Eye Irrit. 2	H319	Causes serious eye irritation.

- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**  
The product is classified and labelled according to the CLP regulation.
- **Hazard pictograms**



GHS02



GHS07

- **Signal word** Warning
- **Hazard statements**  
H223-H229 Flammable aerosol. Pressurised container: May burst if heated.  
H315 Causes skin irritation.  
H319 Causes serious eye irritation.

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### · Precautionary statements

- P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
- P251 Do not pierce or burn, even after use.
- P211 Do not spray on an open flame or other ignition source.
- P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
- P321 Specific treatment (see on this label).
- P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F.

### · Additional information:

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

Do not spray on a naked flame or any incandescent material. Keep away from sources of ignition - No smoking.

Buildup of explosive mixtures possible without sufficient ventilation.

### · 2.3 Other hazards

### · Results of PBT and vPvB assessment

- **PBT:** Not applicable.
- **vPvB:** Not applicable.

## SECTION 3: Composition/information on ingredients

### · 3.2 Chemical characterisation: Mixtures

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

### · Ingredients:

Dangerous components:

CAS: 406-58-6 ELINCS: 430-250-1	1,1,1,3,3-pentafluorobutane ⚠ Flam. Liq. 2, H225	25-50%
CAS: 507-55-1 EINECS: 208-076-9	1,3,-Dichloro-1,1,2,2,3-pentafluoropropane ⚠ Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319	10-25%
CAS: 67-63-0 EINECS: 200-661-7	propan-2-ol ⚠ Flam. Liq. 2, H225; ⚠ Eye Irrit. 2, H319; STOT SE 3, H336	2.5-10%
CAS: 422-56-0 EINECS: 207-016-9	3,3-Dichloro-1,1,1,2,2-pentafluoropropane ⚠ Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319	2.5-10%

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

## SECTION 4: First aid measures

### · 4.1 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** Do not induce vomiting; call for medical help immediately.

- **4.2 Most important symptoms and effects, both acute and delayed** No further relevant information available.

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- **4.3 Indication of any immediate medical attention and special treatment needed**  
No further relevant information available.

### SECTION 5: Firefighting measures

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

CO<sub>2</sub>, sand, extinguishing powder. Do not use water.

- **For safety reasons unsuitable extinguishing agents**  
Water.  
Water with full jet.
- **5.2 Special hazards arising from the substance or mixture**  
During heating or in case of fire poisonous gases are produced.
- **5.3 Advice for firefighters**
- **Protective equipment:** Mount respiratory protective device.

### SECTION 6: Accidental release measures

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



Wear protective equipment. Keep unprotected persons away.

- Ensure adequate ventilation
- **6.2 Environmental precautions:** Do not allow to enter sewers/ surface or ground water.
- **6.3 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
- **6.4 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.

### SECTION 7: Handling and storage

- **7.1 Precautions for safe handling** Ensure good ventilation/exhaustion at the workplace.
- **Information about protection against explosions and fires:**



Keep ignition sources away - Do not smoke.

- Protect against electrostatic charges.
- Keep respiratory protective device available.
- Pressurised 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.

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Do not spray on a naked flame or any incandescent material.  
Use explosion-proof apparatus / fittings and spark-proof tools.

· **7.2 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 pressurised containers.

· **Information about storage in one common storage facility:**

Store away from foodstuffs.

Store away from oxidising agents.

· **Further information about storage conditions:**

Keep receptacle tightly sealed.

Store in cool, dry conditions in well sealed receptacles.

Protect from heat and direct sunlight.

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

## SECTION 8: Exposure controls/personal protection

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

· **8.1 Control parameters**

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

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

WEL Long-term value: 4240 mg/m<sup>3</sup>, 1000 ppm

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

WEL Short-term value: 1250 mg/m<sup>3</sup>, 500 ppm

Long-term value: 999 mg/m<sup>3</sup>, 400 ppm

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

· **8.2 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.

· **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:**

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

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.

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- **Eye protection:** Tightly sealed goggles.
- **Body protection:** Protective work clothing.

### SECTION 9: Physical and chemical properties

#### · 9.1 Information on basic physical and chemical properties

##### · General Information

##### · Appearance:

<b>Form:</b>	Aerosol
<b>Colour:</b>	Clear
<b>Odour:</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>	Not applicable, as aerosol

· **Flash point:** -26 °C

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

· **Ignition temperature:** 425 °C

· **Decomposition temperature:** Not determined.

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

· **Danger of explosion:** Not determined.

##### · Explosion limits:

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

· **Vapour pressure at 20 °C:** 5716 hPa

· **Density:** Not determined

· **Relative density** Not determined.

· **Vapour 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:

<b>dynamic:</b>	Not determined.
<b>kinematic:</b>	Not determined.

##### · Solvent content:

**Organic solvents:** 90-100 %

· **9.2 Other information** No further relevant information available.

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### SECTION 10: Stability and reactivity

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

### SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity**
- **Primary irritant effect:**
- **Skin corrosion/irritation** Irritant to skin and mucous membranes.
- **Serious eye damage/irritation** Irritating effect.
- **Respiratory or skin sensitisation** No sensitising 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

### SECTION 12: Ecological information

- **12.1 Toxicity**
- **Aquatic toxicity:** No further relevant information available.
- **12.2 Persistence and degradability** No further relevant information available.
- **12.3 Bioaccumulative potential** No further relevant information available.
- **12.4 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.
- **12.5 Results of PBT and vPvB assessment**
- **PBT:** Not applicable.
- **vPvB:** Not applicable.
- **12.6 Other adverse effects** No further relevant information available.

### SECTION 13: Disposal considerations

- **13.1 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.

## SECTION 14: Transport information

- |                                       |                     |
|---------------------------------------|---------------------|
| <b>· 14.1 UN-Number</b>               | UN1950              |
| <b>· ADR, IMDG, IATA</b>              |                     |
| <b>· 14.2 UN proper shipping name</b> |                     |
| <b>· ADR</b>                          | 1950 AEROSOLS       |
| <b>· IMDG</b>                         | AEROSOLS            |
| <b>· IATA</b>                         | AEROSOLS, flammable |

<b>· 14.3 Transport hazard class(es)</b>	
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<b>· ADR</b>	
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- |                |             |
|----------------|-------------|
| <b>· Class</b> | 2 5F Gases. |
| <b>· Label</b> | 2.1         |

<b>· IMDG, IATA</b>	
---------------------	--



- |                |     |
|----------------|-----|
| <b>· Class</b> | 2.1 |
| <b>· Label</b> | 2.1 |

<b>· 14.4 Packing group</b>	Void
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<b>· ADR, IMDG, IATA</b>	
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<b>· 14.5 Environmental hazards:</b>	
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<b>· Marine pollutant:</b>	No
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<b>· 14.6 Special precautions for user</b>	Warning: Gases.
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<b>· Danger code (Kemler):</b>	-
<b>· EMS Number:</b>	F-D,S-U

<b>· 14.7 Transport in bulk according to Annex II of</b>	
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<b>MARPOL73/78 and the IBC Code</b>	Not applicable.
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<b>· Transport/Additional information:</b>	
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<b>· ADR</b>	
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<b>· Limited quantities (LQ)</b>	1L
<b>· Excepted quantities (EQ)</b>	Code: E0 Not permitted as Excepted Quantity

<b>· Transport category</b>	3
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<b>· Tunnel restriction code</b>	E
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<b>· IMDG</b>	
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<b>· Limited quantities (LQ)</b>	1L
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- |                                   |  |
|-----------------------------------|--|
| · <b>Excepted quantities (EQ)</b> | Code: E0<br>Not permitted as Excepted Quantity |
| · <b>UN "Model Regulation":</b>   | UN1950, AEROSOLS, 2.1                          |

### SECTION 15: Regulatory information

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

##### · Philippines Inventory of Chemicals and Chemical Substances

(-)

1,1,1,3,3-pentafluorobutane

##### · Australian Inventory of Chemical Substances

(-)

1,1,1,3,3-pentafluorobutane

#### · National regulations

#### · Technical instructions (air):

Class	Share in %
NK	8.8

- **Water hazard class:** Water hazard class 1 (Self-assessment): slightly hazardous for water.
- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

### SECTION 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 vapour.
- H315 Causes skin irritation.
- H319 Causes serious eye irritation.
- H332 Harmful if inhaled.
- H336 May cause drowsiness or dizziness.

#### · Abbreviations and acronyms:

- RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
- IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)
- ICAO: International Civil Aviation Organisation
- ICAO-TI: Technical Instructions by the "International Civil Aviation Organisation" (ICAO)
- 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
- IATA: International Air Transport Association
- GHS: Globally Harmonised System of Classification and Labelling of Chemicals
- 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
- Flam. Aerosol 2: Flammable aerosols, Hazard Category 2
- 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

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Eye Irrit. 2: Serious eye damage/eye irritation, Hazard Category 2  
STOT SE 3: Specific target organ toxicity - Single exposure, Hazard Category 3

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

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