

Material Safety Data Sheet

acc. to ISO/DIS 11014

Printing date 11/20/2008

Reviewed on 11/20/2008




1 Identification of substance:

- **Product details:**
- **Trade name:** Electricorr VpCI-238 Aerosol
- **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 information:** Chemtrec (for spill, leak, fire exposure or accident): 1-800-424-9300

2 Composition/Data on components:

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

- **Dangerous components:**

CAS: 5131-66-8 EINECS: 225-878-4	1-butoxypropan-2-ol	 Xi; R 36/38	11-14%
CAS: 75-28-5 EINECS: 200-857-2	isobutane (containing $\geq 0,1$ % butadiene (203-450-8))	 F+; R 12	10-15%
CAS: 74-98-6 EINECS: 200-827-9	propane liquefied	 F+; R 12	10-15%

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

3 Hazards identification

- **Hazard description:**



Extremely flammable

- **Information pertaining to particular dangers for man 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.

Extremely flammable.

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.

79.5 % by mass of the contents are flammable

Keep out of the reach of children.

- **Classification system**

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



Health = 2

Fire = 3

Reactivity = 1

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· HMIS rating system (0-4)

HEALTH	2	Health = 2
FIRE	3	Flammability = 3
REACTIVITY	1	Reactivity = 1

4 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.

5 Fire fighting measures

· Suitable extinguishing agents



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

· For safety reasons unsuitable extinguishing agents

Water.

Water with full jet.

· Protective equipment: No special measures required.

6 Accidental release measures

· Person-related safety precautions:



Wear protective equipment. Keep unprotected persons away.

· Measures for environmental protection:

No special measures required.

Do not allow to enter sewers/ surface or ground water.

· Measures for cleaning/collecting:

Ensure adequate ventilation.

Do not flush with water or aqueous cleansing agents

7 Handling and storage

· Handling

· **Information for safe handling:** Open and handle receptacle with care.

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



Keep ignition sources away - Do not smoke.

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Protect against electrostatic charges.

· **Storage**

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

Store in a cool location.

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.

Do not gas tight seal receptacle.

Store in cool, dry conditions in well sealed receptacles.

Protect from heat and direct sunlight.

8 Exposure controls and personal protection

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

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

75-28-5 isobutane (containing $\geq 0,1$ % butadiene (203-450-8)) (12.0%)

REL	1900 mg/m ³ , 800 ppm
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74-98-6 propane liquefied (12.0%)

PEL	1800 mg/m ³ , 1000 ppm
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REL	1800 mg/m ³ , 1000 ppm
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TLV	Varies mg/m ³ , 1000 ppm
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· **Additional information:** The lists that were valid during the creation were used as basis.

· **Personal protective equipment**

· **General protective and hygienic measures** Wash hands before breaks and at the end of work.

· **Breathing equipment:** Suitable respiratory protective device recommended.

· **Protection of hands:**

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

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

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 trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

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

9 Physical and chemical properties:

· **General Information**

Form:	Aerosol
Color:	Light yellow
Odor:	Characteristic

· **Change in condition**

Melting point/Melting range: undetermined

Boiling point/Boiling range: Not applicable, as aerosol

· **Flash point:** Not applicable, as aerosol

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· Ignition temperature:	265°C (509°F)
· Auto igniting:	Product is not selfigniting.
· Danger of explosion:	Risk of explosion by shock, friction, fire or other sources of ignition.
· Explosion limits:	
Lower:	0.6 Vol %
Upper:	10.9 Vol %
· Vapor pressure at 20°C (68°F):	8300 hPa (6226 mm Hg)
· Density at 20°C (68°F):	0.78-0.81 g/cm ³
· Solubility in / Miscibility with Water:	Not miscible or difficult to mix
· Solvent content:	
Organic solvents:	65-70 %
· Solids content:	4.5 %

10 Stability and reactivity

- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **Dangerous reactions** No dangerous reactions known
- **Dangerous products of decomposition:** No dangerous decomposition products known

11 Toxicological information

- **Acute toxicity:**
- **Primary irritant effect:**
- **on the skin:** No irritant effect.
- **on the eye:** No irritating effect.
- **Sensitization:** No sensitizing effects known.

12 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.

13 Disposal considerations

- **Product:**
- **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

· DOT regulations:



- **Hazard class:** 2.1
- **Identification number:** UN1950
- **Packing group:** -
- **Proper shipping name (technical name):** AEROSOLS, flammable
- **Label:** 2.1

· Land transport ADR/RID (cross-border)



- **ADR/RID class:** 2 5F Gases
- **Danger code (Kemler):** -
- **UN-Number:** 1950
- **Packaging group:** -
- **Label:** 2.1
- **Description of goods:** 1950 AEROSOLS

· Maritime transport IMDG:



- **IMDG Class:** 2.1
- **UN Number:** 1950
- **Label:** 2.1
- **Packaging group:** -
- **EMS Number:** F-D,S-U
- **Marine pollutant:** No
- **Propper shipping name:** AEROSOLS

· Air transport ICAO-TI and IATA-DGR:



- **ICAO/IATA Class:** 2.1
- **UN/ID Number:** 1950
- **Label:** 2.1
- **Packaging group:** -

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Propper shipping name: *AEROSOLS, flammable*

15 Regulations

· SARA Section 355 (extremely hazardous substances)

None of the ingredients is listed.

· SARA Section 313 (specific toxic chemical listings)

None of the ingredients is listed.

· 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.

· IARC (International Agency for Research on Cancer)

None of the ingredients is listed.

· NTP (National Toxicology Program)

None of the ingredients is listed.

· TLV (Threshold Limit Value established by ACGIH)

None of the ingredients is listed.

· MAK (German Maximum Workplace Concentration)

112-80-1 oleic acid, pure

3A

· 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.

· Markings according to EU guidelines:

The product has been classified and marked in accordance with EU Directives / Ordinance on Hazardous Materials

· Code letter and hazard designation of product:

Extremely flammable

· Risk phrases:

Extremely flammable.

· Safety phrases:

Keep container in a well-ventilated place.

Keep away from sources of ignition - No smoking.

Take precautionary measures against static discharges.

In case of fire, use sand, carbon dioxide or powdered extinguishing agent. Never use water.

Use only in well-ventilated areas.

This material and its container must be disposed of as hazardous waste.

· Special labeling of certain preparations:

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.

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79.5 % by mass of the contents are flammable
Keep out of the reach of children.

· **National regulations**

· **Technical instructions (air):**

Class	Share in %
NK	69.5

· **Water hazard class:** Water hazard class 1 (Self-assessment): slightly hazardous for water.

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.

· **Department issuing MSDS:** Environment protection department.

· **Contact:**

Dr. Margarita Kharshan, Laboratory Director

Dr. Christophe Chandler, Director of Corporate Quality and Regulatory Affairs

USA