



## **Material Safety Data Sheet**

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### **1. Identification of the substance/mixture and of the company/undertaking**

<b>Product:</b>	Cold spray/aerosol (Kältespray/Spraydose)
<b>Manufacturer:</b>	Conrad Electronic SE
<b>Address:</b>	Klaus-Conrad-Str. 1, D-92240 Hirschau
<b>Telephone:</b>	+49 (0) 9604 / 40 - 8988
<b>Erstellungsdatum:</b>	16.04.2019

#### **1.1. Product identifier**

Cold spray/aerosol (Kältespray/Spraydose)

#### **1.2. Relevant identified uses of the substance or mixture and uses advised against**

Cleaners - Precision



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### 2. Hazards identification

#### 2.1. Classification of the substance or mixture

##### Classification according to Regulation (EC) No 1272/2008

Physical: Aerosol, category 3

Pressurised container: May burst if heated.

Health: Not classified

Environment: Not classified

Other hazards: Avoid contact with skin and eyes, in case of contact with liquid product frostbite symptoms may occur.

#### 2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008

##### Product identifier:

Signal word: Warning

Hazard statement(s): H229: Pressurised container: May burst if heated.

Precautionary statement(s): P102: Keep out of reach of children.

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.

P336: Thaw frosted parts with lukewarm water. Do not rub affected area.

P410/412: Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.

##### Supplemental Hazard information:

Avoid contact with skin and eyes, in case of contact with liquid product frostbite symptoms may occur.

##### Regulation (EC) No 648/2004 on detergents:

Halogenated hydrocarbons > 30 %

#### 2.3. Other hazards

In case of contact with liquid product frostbite symptoms may occur.

Aerosols may explode if heated above 50°C

### 3. Composition/information on ingredients

#### 3.1. Substances

Hazardous ingredient	Registration number	CAS-nr.	EC-nr	w/w %	Hazard Class and Category	Hazard statement	Notes
trans-1,3,3,3-tetrafluoroprop-1-ene	01-0000019758-54	29118-24-9	471-480-0	100	Press. Gas	H280	

(\* Explanation phrases : see chapter 16)

#### 3.2. Mixtures

Not applicable.



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### **4. First aid measures**

#### **4.1. Description of first aid measures**

##### **Contact with eyes:**

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

##### **Contact with skin:**

In case of contact with liquid, thaw frosted parts with water, remove clothing carefully and wash with soap & water.

Seek medical advice.

##### **Inhalation:**

Fresh air, keep warm and at rest.

##### **Ingestion:**

In case of accident or if you feel unwell, seek medical advice (show the label where possible)

#### **4.2. Most important symptoms and effects, both acute and delayed**

##### **Inhalation:**

Excessive inhalation of solvent vapours may give rise to nausea, headaches and dizziness

##### **Ingestion:**

Not available.

##### **Skin contact:**

In case of contact with liquid product frostbite symptoms may occur.

##### **Eye contact:**

In case of contact with liquid product frostbite symptoms may occur.

#### **4.3. Indication of any immediate medical attention and special treatment needed**

##### **General Advice:**

In case of accident or if you feel unwell, seek medical advice (show the label where possible)

If symptoms persist always call a doctor

### **5. Firefighting measures**

#### **5.1. Extinguishing media**

Water, foam, carbon dioxide or dry agent

#### **5.2. Special hazards arising from the substance or mixture**

Aerosols may explode if heated above 50°C

Forms hazardous decomposition products CO, CO<sub>2</sub>

HF may be formed under condition of fire

#### **5.3. Advice for firefighters**

Keep container(s) exposed to fire cool, by spraying with water

In case of fire, do not breathe fumes



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### **6. Accidental release measures**

#### **6.1. Personal precautions, protective equipment and emergency procedures**

Shut off all ignition sources

Ensure adequate ventilation

Wear suitable protective clothing and gloves.

#### **6.2. Environmental precautions**

Do not allow to enter public sewers and watercourses

#### **6.3. Methods and material for containment and cleaning up**

Allow product to evaporate

#### **6.4. Reference to other sections**

For further information see section 8

### **7. Handling and storage**

#### **7.1. Precautions for safe handling**

Keep away from heat and sources of ignition

Do not spray on a naked flame or incandescent material.

Do not pierce or burn aerosols, even after use.

Do not breathe aerosols or vapours.

Ensure adequate ventilation

Avoid contact with skin and eyes.

For use on energized equipment keep ambient temperature below 28°C.

#### **7.2. Conditions for safe storage, including any incompatibilities**

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

Store in a well-ventilated place.

Keep out of reach of children.

#### **7.3. Specific end use(s)**

Cleaners - Precision



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### **8. Exposure controls/personal protection**

#### **8.1. Control parameters**

Exposure limits:

No information available

#### **8.2. Exposure controls**

##### **Control procedures:**

Ensure adequate ventilation

Keep away from heat and sources of ignition

##### **Personal protection:**

Take precautions to avoid contact with skin and eyes when handling the product.

Ensure adequate ventilation

##### **Inhalation:**

In case of insufficient ventilation, wear suitable respiratory equipment.

Compressed air mask.

Recommended respiratory protection: (compressed air)

##### **Hands and skin:**

For incidental contact with the product wear chemical-resistant gloves (standard EN 374). The use of disposable gloves is acceptable provided that they are changed immediately after a splash or spill.

In all cases handle and use the product in accordance with good industrial hygiene practices.

Recommended gloves: (VITON)

##### **Eyes:**

Wear safety eyewear according to EN 166.

##### **Environmental protection:**

Avoid release to the environment.

##### **Consumer exposure protection:**

Do not eat, drink or smoke when using this product.

Use only outdoors or in a well-ventilated area.

IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician.



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### **9. Physical and chemical properties**

#### **9.1. Information on basic physical and chemical properties**

(for aerosols data for the product without propellant)

Appearance: physical state:	Liquified gas
Colour:	Colorless
Odour:	Neutral
pH:	Not applicable
Boiling point/range:	-19 °C
Flash point:	None
Evaporation rate:	Not applicable
Explosion limit:	Upper limit: No UEL was assigned at standard testing conditions(20°C). Exhibits flame limits at temperatures in excess of 28°C. Lower limit: No LEL was assigned at standard testing conditions(20°C). Exhibits flame limits at temperatures in excess of 28°C.
Vapour pressure:	420 kPa (@ 20°C).
Relative density:	1.18 g/cm <sup>3</sup> (@ 20°C).
Solubility in water:	Partly soluble in water
Auto-ignition:	288-293 °C
Viscosity:	Not applicable.

#### **9.2. Other information**

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### **10. Stability and reactivity**

#### **10.1. Reactivity**

No hazardous reactions known if used for its intended purpose

#### **10.2. Chemical stability**

Stable

#### **10.3. Possibility of hazardous reactions**

No hazardous reactions known if used for its intended purpose

#### **10.4. Conditions to avoid**

Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C.

Avoid overheating

#### **10.5. Incompatible materials**

Strong oxidising agent

#### **10.6. Hazardous decomposition products**

CO, CO<sub>2</sub>

HF may be formed under condition of fire



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### **11. Toxicological information**

#### **11.1. Information on toxicological effects**

**Acute toxicity:**

Based on available data the classification criteria are not met

**Skin corrosion/irritation:**

Based on available data the classification criteria are not met

**Serious eye damage/irritation:**

Based on available data the classification criteria are not met

**Respiratory or skin sensitisation:**

Based on available data the classification criteria are not met

**Germ cell mutagenicity:**

Based on available data the classification criteria are not met

**Carcinogenicity:**

Based on available data the classification criteria are not met

**Toxicity for reproduction:**

Based on available data the classification criteria are not met

**STOT-single exposure:**

Based on available data the classification criteria are not met

**STOT repeated exposure:**

Based on available data the classification criteria are not met

**Aspiration hazard:**

Based on available data the classification criteria are not met

**Information on likely routes of exposure:**

**Inhalation:**

Inhalation of gas may give rise to nausea, headaches and dizziness.

**Ingestion:**

Ingestion is unlikely to occur

**Skin contact:**

In case of contact with liquid product frostbite symptoms may occur.

**Eye contact:**

In case of contact with liquid product frostbite symptoms may occur.

**Toxicological data:**

No information available



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### **12. Ecological information**

#### **12.1. Toxicity**

**Ecotoxicological data:**

No information available

#### **12.2. Persistence and degradability**

Not readily biodegradable

#### **12.3. Bioaccumulative potential**

For all ingredients the octanol-water partition coefficient is below 4.

#### **12.4. Mobility in soil**

No information available

#### **12.5. Results of PBT and vPvB assessment**

No information available

#### **12.6. Other adverse effects**

No experimental data available

GWP (global warming potential): 7 (calculated in accordance with Annex IV of Regulation (EU) No 517/2014 on fluorinated greenhouse gases)

### **13. Disposal considerations**

#### **13.1. Waste treatment methods**

**Product:**

This material and its container must be disposed of in a safe way.

Do not discharge into drains or the environment, dispose to an authorised waste collection point.

**Contaminated packaging:**

Disposal should be in accordance with local, state or national legislation





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### **14. Transport information**

#### **14.1. UN number**

UN-number: 1950

#### **14.2. UN proper shipping name**

Proper shipping name:

AEROSOLS

#### **14.3. Transport hazard class(es)**

Class: 2.2

ADR/RID - Classification code: 5A

#### **14.4. Packing group**

Packing group: Not applicable.

#### **14.5. Environmental hazards**

ADR/RID - Environmentally hazardous: No

IMDG - Marine pollutant: No

IATA/ICAO - Environmentally hazardous: No

#### **14.6. Special precautions for user**

ADR/RID - Tunnelcode: (E)

IMDG - Ems: F-D, S-U

IATA/ICAO - PAX: 203

IATA/ICAO - CAO: 203

#### **14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code**

Not applicable.



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### **15. Regulatory information**

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

The Safety Data Sheet is compiled according to the current European requirements.

Regulation (EC) No 1907/2006 (REACH)

Regulation (EC) No 1272/2008 (CLP)

Dir. 2013/10/EU, 2008/47/EC amendment of the aerosol dispenser directive 75/324/EEC.

#### **15.2. Chemical safety assessment**

No information available

### **16. Other information**

\*Explanation hazard statements:

H280: Contains gas under pressure; may explode if heated.

This product should be stored, handled and used in accordance with good industrial hygiene practices and in conformity with any legal regulation. The information contained herewith is based on the present state of our knowledge and is intended to describe our products from the point of view of safety requirements. It does not guarantee any specific properties.