

EU Material Safety Data Sheet

According to 91/155 EEC& 93/112 EWG

Printing date 12.07.2005

V - 2

Reviewed on 12.07.2005



1 Identification of substance:

- **Product details:**
- **Trade name: Cramolin Kälte BR**
- **Article number:** 146 Aerosol
- **Application of the substance / the preparation:** Compressed air
- **Manufacturer/Supplier:**
ITW Chemische Produkte GmbH
Mühlacker Str. 149
D-75417 Mühlacker
Tel: +49 7041 96340
Fax: +49 7041 963429
E-Mail: info@cramolin.de
Internet: www.carmolin.de
- **Informing department:** Product safety department
- **Emergency information:**
ITW Chemische Produkte GmbH
Tel: +49 7041 96340

2 Composition/Data on components:

- **Chemical characterization**
- **Description:** Mixture consisting of the following components.

- **components:**

CAS: 106-97-8 EINECS: 203-448-7	butane, pure	 F+; R 12	50-100%
CAS: 74-98-6 EINECS: 200-827-9	propane liquefied	 F+; R 12	25-<50%

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

3 Hazards identification

- **Hazard designation:**



F+ Extremely flammable

- **Information pertaining to particular dangers for man and environment**

The marking is valid for all pressurized container up to 50ml carrying capacity.

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.

R 12 Extremely flammable.

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

Do not pierce or burn, even after use.

100.0 % by mass of the contents are flammable

Keep out of the reach of children

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· Classification system

The classification is in line with current EC lists. It is expanded, however, by information from technical literature and by information furnished by supplier companies.

4 First aid measures

- **General information** Instantly remove any clothing soiled by the product.
- **After inhalation**
Supply fresh air. If required, provide artificial respiration. Keep patient warm. Consult doctor if symptoms persist.
In case of unconsciousness bring patient into stable side position for transport.
- **After skin contact**
Instantly wash with water and soap and rinse thoroughly.
If skin irritation continues, consult a doctor.
- **After eye contact**
Rinse opened eye for several minutes under running water. Then consult doctor.
- **After swallowing**
Do not induce vomiting; instantly call for medical help.
A person vomiting while lying on their back should be turned onto their side.

5 Fire fighting measures

- **Suitable extinguishing agents** CO₂, sand, extinguishing powder. Do not use water.
- **For safety reasons unsuitable extinguishing agents** Water.
- **Special hazards caused by the material, its products of combustion or resulting gases:**
Formation of toxic gases is possible during heating or in case of fire.
Store in a cool place. Heat will increase pressure and may lead to the container exploding.
- **Protective equipment:**
Wear self-contained breathing apparatus.
Do not inhale explosion gases or combustion gases.
- **Additional information** Cool endangered containers with water spray jet.

6 Accidental release measures

- **Person-related safety precautions:**
Wear protective equipment. Keep unprotected persons away.
Ensure adequate ventilation
Keep away from ignition sources
Avoid contact with the eyes and skin.
- **Measures for environmental protection:**
Do not allow product to reach sewage system or water bodies.
- **Measures for cleaning/collecting:**
Ensure adequate ventilation.
Do not flush with water or aqueous cleansing agents
Absorb liquid components with liquid-binding material.
Dispose of the material collected according to regulations.
- **Additional information:** See Section 7 for information on safe handling

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7 Handling and storage

- **Handling**
- **Information for safe handling:**
Store in cool, dry place in tightly closed containers.
Keep away from heat and direct sunlight.
Open and handle container with care.
- **Information about protection against explosions and fires:**
Do not spray on flames or red-hot objects.
Beware: Container is pressurized. Keep away from direct sun exposure and temperatures over 50°C. Do not open by force or throw into fire even after use.
Keep ignition sources away - Do not smoke.
Protect against electrostatic charges.
- **Storage**
- **Requirements to be met by storerooms and containers:**
Store in cool location.
Store only in the original container.
Observe official regulations on storing packagings with pressurized containers.
- **Information about storage in one common storage facility:** Store away from foodstuffs.
- **Further information about storage conditions:**
Store in cool, dry conditions in well sealed containers.
Store in a cool place. Heat will increase pressure and may lead to the container exploding.

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:**

106-97-8 butane, pure

OES (Great Britain)	Short-term value: 1810 mg/m ³ , 750 ppm Long-term value: 1450 mg/m ³ , 600 ppm
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74-98-6 propane liquefied

OES (Great Britain)	Asphyxiant
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- **Additional information:** The lists that were valid during the compilation were used as basis.
- **Personal protective equipment**
- **General protective and hygienic measures**
The usual precautionary measures should be adhered to general rules for handling chemicals.
Keep away from foodstuffs, beverages and food.
Wash hands during breaks and at the end of the work.
Avoid contact with the eyes and skin.
- **Breathing equipment:** Use breathing protection in case of insufficient ventilation.
- **Protection of hands:**
Not required if the product is used appropriately
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

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Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

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 safety glasses.

9 Physical and chemical properties:

General Information

Form:	Aerosol
Colour:	Colourless
Odour:	Characteristic

Change in condition

Melting point/Melting range:	Not determined
Boiling point/Boiling range:	-44°C

Flash point: -97°C**Ignition temperature:** 365°C**Self-inflammability:** Product is not self igniting.**Danger of explosion:** Product is not explosive. However, formation of explosive air/steam mixtures is possible.**Critical values for explosion:**

Lower:	1.5 Vol %
Upper:	9.5 Vol %

Vapour pressure at 20°C: 7.7 hPa**Density at 20°C** 0.002 g/cm³**Solubility in / Miscibility with****Water:** Not miscible or difficult to mix**Solvent content:****Organic solvents:** 100.0 %

10 Stability and reactivity

Thermal decomposition/ Conditions to be avoided:

No decomposition if used and stored according to specifications.

Dangerous reactions Danger of bursting**Dangerous products of decomposition:** none

11 Toxicological information

Acute toxicity:**LD/LC50 values that are relevant for classification:** no data available.

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- **Primary irritant effect:**
- **on the eye:** no data available.
- **Sensitisation:** No sensitising effect known.

12 Ecological information:

- **General notes:** Generally not hazardous for water.

13 Disposal considerations

- **Product:**
- **Recommendation**
Must not be disposed of together with household garbage. Do not allow product to reach sewage system.
Hand over to disposers of hazardous waste.
Disposal must be made according to official regulations.

- **European waste catalogue**

16 05 04 | gases in pressure containers (including halons) containing dangerous substances

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

14 Transport information

- **Land transport ADR/RID (cross-border)**



- **ADR/RID-GGVS/E Class:** 2 5F Gases.
- **Kemler Number:** 23
- **UN-Number:** 1950
- **Packaging group:** -
- **Label** 2.1
- **Designation of goods:** 1950 AEROSOLS (BUTANE, PROPANE)

- **Maritime transport IMDG:**



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

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· **Correct technical name:** AEROSOLS (BUTANE, PROPANE)

· **Air transport ICAO-TI and IATA-DGR:**



· **ICAO/IATA Class:** 2.1

· **UN/ID Number:** 1950

· **Label:** 2.1

· **Packaging group:** -

· **Correct technical name:** AEROSOLS, flammable (BUTANE, PROPANE)

15 Regulatory information

· **Designation according to EC guidelines:**

The product has been classified and labelled in accordance with EC Directives and the Ordinance on Hazardous Materials (GefStoffV).

· **Code letter and hazard designation of product:**



F+ Extremely flammable

· **Risk phrases:**

12 Extremely flammable.

· **Safety phrases:**

3 Keep in a cool place.

16 Keep away from sources of ignition - No smoking.

33 Take precautionary measures against static discharges.

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

51 Use only in well-ventilated areas.

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

· **Special designation of certain preparations:**

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

Do not pierce or burn, even after use.

100.0 % by mass of the contents are flammable

Keep out of the reach of children

· **National regulations**

· **Water hazard class:** Generally not hazardous for water.

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16 Other information:

Information is based on our current knowledge but does not establish a promise of product characteristics and does not substantiate any contractual legal relationship. Drawing of back-up data file for:

MSDS - Service - Center gmbH.
Materiel-Safety-Data-Sheet
Alemannenstrasse 49
6830 Rankweil
AUSTRIA

Tel.: +43-(0)5522-60067
Fax.: +43-(0)5522-41031
E-Mail: office@msds.at
www.msds.at

- **Relevant R-phrases**
12 Extremely flammable.
- **Contact:** ITW Chemische Produkte GmbH, D-75417 Mühlacker
- * **Data compared to the previous version altered.** .

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