



Printing date 28.09.2010 V - 3 Revision: 28.09.2010

1 Identification of substance:

· Product details:

· Trade name: Cramolin Kälte BR

· Article number: 146 Aerosol

- Application of the substance / the preparation:

Quickly Tracks Thermal Intermittens, Cools down to -50°C

· Manufacturer/Supplier:

Mühlacker Str. 149

ITW Chemische Produkte GmbH & Co. KG

D-75417 Mühlacker Tel: +49 7041 96340 Fax: +49 7041 963429 E-Mail: info@itwcp.de Internet: www.itwcp.de

· Informing department: Product safety department

Emergency information:

ITW Chemische Produkte GmbH & Co. KG

Tel: +49 7041 96340 Mo - Do 8:00 - 16:30 Fr 8:00 - 14:00

2 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.

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.

Keep out of the reach of children

· 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.

3 Composition/information on ingredients

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

(Contd. on page 2)





Printing date 28.09.2010 V - 3 Revision: 28.09.2010

Trade name: Cramolin Kälte BR

(Contd. of page 1)

· components:			
CAS: 74-98-6 EINECS: 200-827-9	propane liquefied	F+; R 12	25-50%
CAS: 106-97-8 EINECS: 203-448-7		F+; R 12	25-50%

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

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.

- · After skin contact Instantly wash with water and soap and rinse thoroughly.
- · After eye contact Call a doctor immediately.

5 Fire fighting measures

· Suitable extinguishing agents

Foam

Fire-extinguishing powder

CO2

- · For safety reasons unsuitable extinguishing agents Water with a full water jet.
- 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.
- · Additional information Cool endangered containers with water spray jet.

6 Accidental release measures

· Person-related safety precautions:

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:

Absorb liquid components with liquid-binding material.

Ensure adequate ventilation.

· Additional information: See Section 7 for information on safe handling

GB



Page 3/7

Safety Data Sheet according to 1907/2006/EC, Article 31

Printing date 28.09.2010 V - 3 Revision: 28.09.2010

Trade name: Cramolin Kälte BR

(Contd. of page 2)

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.

Ensure good ventilation/exhaustion at the workplace.

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.

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:

106-97-8 butane, pure (25-<50%)

WEL (Great Britain) Short-term value: 1810 mg/m³, 750 ppm Long-term value: 1450 mg/m³, 600 ppm Carc (if more than 0.1% of buta-1.3-diene)

- · Additional information: The lists that were valid during the compilation were used as basis.
- · Personal protective equipment
- General protective and hygienic measures

Keep away from foodstuffs, beverages and feed.

Wash hands during breaks and at the end of the work.

Avoid contact with the eyes and skin.

Do not eat, drink or smoke while working.

- · Breathing equipment: Use breathing protection in case of insufficient ventilation.
- · Protection of hands:

Protective gloves.

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

(Contd. on page 4)





Printing date 28.09.2010 V - 3 Revision: 28.09.2010

Trade name: Cramolin Kälte BR

(Contd. of page 3)

· 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: Colour: Odour:	Aerosol colourless Characteristic	
 Change in condition Melting point/Melting range: Not applicable Boiling point/Boiling range: Not applicable 		
· Flash point:	Not applicable	
· Ignition temperature:	> 400°C (spray mist)	
· 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: 8.5 Vol %		
· Vapour pressure at 20°C:	5.0 bar	
· Density at 20°C	0.55 g/cm³	
· Solubility in / Miscibility with Water:	Not miscible or difficult to mix	

10 Stability and reactivity

- · Thermal decomposition/ Conditions to be avoided: Protect from heat and direct sunlight.
- Dangerous reactions Danger of bursting
- · Dangerous products of decomposition:

No dangerous products of decomposition if used and stored according to specifications.

11 Toxicological information

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

(Contd. on page 5)





Printing date 28.09.2010 V - 3 Revision: 28.09.2010

Trade name: Cramolin Kälte BR

(Contd. of page 4)

- · Primary irritant effect:
- · on the eye: no data available.
- · Additional toxicological information: Inhalation of vapours can lead to narcotic aspects.
- · Sensitisation No sensitising effect known.

12 Ecological information:

· General notes: Generally not hazardous for water.

13 Disposal considerations

- · Product:
- · Recommendation 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: -

· UN-Number: 1950 · Packaging group: -

· Label 2.1

· Designation of goods: 1950 AEROSOLS (PROPANE, BUTANE)

· Maritime transport IMDG:



· IMDG Class: 2.1 · UN Number: 1950 · Label 2.1 · Packaging group: -

• EMS Number: F-D,S-U
• Marine pollutant: No

(Contd. on page 6)





Printing date 28.09.2010 V - 3 Revision: 28.09.2010

Trade name: Cramolin Kälte BR

(Contd. of page 5)

· Correct technical name: AEROSOLS (PROPANE, BUTANE)

· 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 (PROPANE, BUTANE)

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:

23 Do not breathe aerosol.

51 Use only in well-ventilated areas.

56 Dispose of this material and its container to hazardous or special waste collection point.

· 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.

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.

Keep out of the reach of children

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

B.





Printing date 28.09.2010 V - 3 Revision: 28.09.2010

Trade name: Cramolin Kälte BR

(Contd. of page 6)

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.

- Relevant R-phrases12 Extremely flammable.
- · Contact: ITW Chemische Produkte GmbH & Co. KG, D-75417 Mühlacker
- * Data compared to the previous version altered.

GB