

# Safety Data Sheet

According to 1907/2006/EC



**primotec**<sup>®</sup>

advanced laboratory systems

**Trade name:** ES100 METACOOOL COLDSPRAY  
**Revision:** 08.04.2015

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## 01. Identification of the substance / mixture and of the company / undertaking

### Trade name

ES100 METACOOOL COLDSPRAY

### Article Number (REF)

ES100

### Application of the substance / the mixture

Cooling spray

### Manufacturer / Supplier

Primotec e.K.

### Street / PO Box

Tannenwaldallee 4

### National indicator / code / city

D – 61348 Bad Homburg

### Contact for technical information

Phone +49/6172/99770-0

### Telephone / Telefax / E-Mail

Phone +49/6172/99770-0 FAX: 06172/99770-99 /E-Mail: primotec@primogroup.de

### Emergency Information

Phone +49/6172/99770-0

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## 02. Hazards Identificaton

### Classification of the substance or mixture

#### R-Phrases

R 12: Extremely flammable

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



GHS02 flame

Flam. Aerosol 1

H 222-H 229: Extremely flammable aerosol. Pressurised container: May burst if heated.

### Information concerning particular hazards for human 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! Pressurised container.

### Classification system

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

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## Label elements

### Labelling according to Regulation (EC) No. 1272/2008

The product is classified and labelled according to the CLP regulation.

## Hazard pictograms



GHS02

## Signal word

Danger

## Hazard statements

H 222-H 229 Extremely flammable aerosol. Pressurised container: May burst if heated.

## Precautionary statements

- P 102 Keep out of reach of children.  
P 210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.  
P 211 Do not spray on an open flame or other ignition source.  
P 251 Do not pierce or burn, even after use.  
P 410 + P 412 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.

## Other hazards

## Results of PBT and vPvB assessment

### PBT

Not applicable.

### vPvB

Not applicable.

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## 03. Composition / information on ingredients

### Chemical characterization

Mixtures

### Description

Mixture of substances listed below with nonhazardous additions.

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## Dangerous components

Description	CAS-No.	EINECS-No.	Content	Symbol	R- and H Phrases
Butane	106-97-8	203-448-7	50 – 70 %	F+ 	R 12 Flam. Gas 1, H 220; Press. Gas, H 280
Propane	74-98-6	200-827-9	10 – 20 %	F+ 	R 12 Flam. Gas 1, H 220; Press. Gas, H 280
Isobutane	75-28-5	200-857-2	10 – 20 %	F+ 	R 12 Flam. Gas 1, H 220; Press. Gas, H 280
Propan-2-ol	67-63-0	200-661-7	1 - 10 %	Xi F 	R 36, R 67 R 11 Flam. Liq. 2, H 225
					Eye Irrit. 2, H 319; STOT SE 3, H 336

### Additional information

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

## 04. First aid measures

### After Inhalation

Supply fresh air, consult doctor in case of complaints.

### After skin contact

Generally the product does not irritate the skin.

### After eye contact

Rinse opened eye for several minutes under running water.

### After swallowing

If symptoms persist consult doctor.

### Information for doctor

#### Most important symptoms and effects, both acute and delayed

No further relevant information available.

#### Indication of any immediate medical attention and special treatment needed

No further relevant information available.

## 05. Firefighting measures

### Suitable extinguishing media

CO<sub>2</sub>, powder or water spray.

Fight larger fires with water spray or alcohol resistant foam.

### Special hazards arising from the substance or mixture

No further relevant information available.

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**Advice for firefighters**

**Protective equipment**

No special measures required.

**Additional information**

Collect contaminated fire fighting water separately. It must not enter the sewage system.

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**06. Accidental release measures**

**Personal precautions, protective equipment and emergency procedures**

Wear protective equipment. Keep unprotected persons away.

**Environmental precautions**

No special measures required.

**Methods and material for containment and cleaning up**

Ensure adequate ventilation.

**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.

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**07. Handling and storage**

**Precautions for safe handling**

Ensure good ventilation / exhaustion at the workplace.

Open and handle receptacle with care.

**Information about fire- and explosion protection**

Keep ignition sources away – Do not smoke.

Protect against electrostatic charges.

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.

Do not spray onto a naked flame or any incandescent material.

**Conditions for safe storage, including any incompatibilities**

**Storage**

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

Store in a cool location.

Observe official regulations on storing packagings with pressurised containers.

**Information about storage in common storage facility**

Not required.

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## Further information about storage conditions

Store in cool, dry conditions in well sealed receptacles.

Protect from heat and direct sunlight.

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.

## Storage class

2 B

## Specific en use(s)

No further relevant information available.

## 08. Exposure controls / personal protection

### Additional information about design of technical facilities

No further data; see item 7.

### Control parameters

#### Ingredients with limit values that require monitoring at the workplace

Description	CAS-No.	Method	Value
Isobutane	75-28-5	AGW	Long-term value: 4 (II); DFG 2400 mg/m <sup>3</sup> , 1000 ml/m <sup>3</sup>
Propan-2-ol	67-63-0	AGW	Long-term value: 2(II); DFG, Y 500 mg/m <sup>3</sup> ; 200 ml/m <sup>3</sup>

#### Ingredients with occupational exposure limits

Description	CAS-No.	Method	Value
Propan-2-ol	67-63-0	BGW	25 mg/l Specimen: Sampling time: Parameter: Whole blood End of exposure / End of Shift Acetone
			25 mg/l Specimen: Sampling time: Parameter: Urine End of exposure / End of Shift Acetone

### Additional information

The lists valid during the making were used as basis.

### Exposure controls

#### Personal protective equipment

#### General protective and hygienic measures

Wash hands before breaks and at the end of work.

Do not inhale gases / fumes / aerosols.

#### Respiratory protection

Not necessary if room is well-ventilated.

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## Protection of hands

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.

## Material of gloves

The selection of 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 goggles.

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## 09. Physical and chemical properties

### Information on basic physical and chemical properties

#### General Information

##### Appearance

**Form:** Aerosol **Colour:** Colourless  
**Odour:** Characteristic  
**Odour treshold:** Not determined  
**pH-value:** Not applicable

##### Change in condition

**Melting point / Melting range:** Undetermined.  
**Boiling point / Boiling range:** Not applicable, as aerosol.  
**Flashpoint:** - 60 °C  
**Flammability:** Not applicable (solid, gaseous)  
**Ignition temperature:** 365 °C  
**Decomposition temperature:** Not determined.  
**Self-igniting:** Product is not selfigniting.  
**Danger of explosion:** Product is not explosive. However, formation of explosive air / vapour mixtures are possible.  
**Lower Explosion limit:** 1.5 Vol. %  
**Upper Explosion limit:** 10.9 Vol. %  
**Vapour pressure:** 4600 hPa at 20 °C  
**Density:** 0.56 g/cm<sup>3</sup> at 20 °C  
**Relative density:** Not determined.  
**Vapour density:** Not determined.  
**Evaporation rate:** Not applicable.  
**Solubility in/Miscibility with water:** Fully miscible.  
**Partition coefficient (n-octanol/water):** Not determined.  
**Viscosity dynamic:** Not determined.  
**Viscosity kinematic:** Not determined.  
**Solvent content VOC (EC):** 99.89 %  
**Other information:** No further relevant information available.

## 10. Stability and reactivity

### Reactivity

#### Chemical Stability

##### Thermal decomposition / conditions to be avoided

No decomposition if used according to specifications.

##### Possibility of hazardous reactions

No dangerous reactions known.

##### Conditions to avoid

No further relevant information available.

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## **Incompatible materials**

No further relevant information available.

## **Hazardous decomposition products**

No dangerous decomposition products known.

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## **11. Toxicological information**

### **Information on toxicological effects**

#### **Acute toxicity**

#### **Primary irritant effect**

On the Skin: No irritant effect.

On the Eye: No irritating effect.

#### **Sensitisation**

No sensitising effects known.

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## **12. Ecological information**

### **Toxicity**

#### **Aquatic toxicity**

No further relevant information available.

#### **Persistence and degradability**

No further relevant information available.

#### **Behaviour in environmental**

#### **Bioaccumulative potential**

No further relevant information available.

#### **Mobility in soil**

No further relevant information available.

### **Additional ecological information**

#### **General notes**

Generally not hazardous for water.

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

PBT: Not applicable.

vPvB: Not applicable.

#### **Other adverse effects**

No further relevant information available.

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## 13. Disposal considerations

### Waste treatment methods

#### Recommendation

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

### European waste catalogue

150104 Metallic packaging

150110 Packaging containing residues of or contaminated by dangerous substances.

### Uncleaned packaging

#### Recommendation

Disposal must be made according to official regulations.

### Recommended cleansing agents

Water, if necessary together with cleansing agents.

## 14. Transport information

### UN-Number

ADR, IMDG, IATA: UN1950

### UN proper shipping name

ADR: 1950 AEROSOLS

IMDG: AEROSOLS

IATA: AEROSOLS, flammable

### Transport hazard class(es)



#### ADR

Class:

2.5F Gases

Label:

2.1



#### IMDG, IATA

Class:

2.1

Label:

2.1

### Packing group

ADR, IMDG, IATA: void

### Environmental hazards

#### Marine pollutant

No

### Special precautions for user

Warning: Gases

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## Danger code (Kemler)

-

## EMS Number

F-D, S-U

## Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable.

## Transport / Additional information

ADR

Limited quantities (LQ): 1L

Excepted quantities (EQ): Code: E0

Not permitted as Excepted Quantity.

Transport category: 2

Tunnel restriction code: D

## UN "Model Regulation"

UN1950, AEROSOLS, 2.1

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## 15. Regulatory information

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

#### R-Phrases

R 12: Extremely flammable

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



GHS02 flame

Flam. Aerosol 1

H 222-H 229: Extremely flammable aerosol. Pressurised container: May burst if heated.

#### Signal word

Danger

#### Hazard statements

H 222-H 229 Extremely flammable aerosol. Pressurised container: May burst if heated.

#### Precautionary statements

P 102 Keep out of reach of children.

P 210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.  
No smoking.

P 211 Do not spray on an open flame or other ignition source.

P 251 Do not pierce or burn, even after use.

P 410 + P 412 Protect from sunlight. Do not expose to temperatures exceeding 50 °C / 122 °F.

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## National regulations

### Technical Instructions on Air Quality

Class: NK  
Content in %: 99.9

### Water hazard class

Generally not hazardous for water.

### Chemical safety assessment

A Chemical Safety Assessment has not been carried out.

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## 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.

### Relevant phrases

H 220 Extremely flammable gas.  
H 225 Highly flammable liquid and vapour.  
H 280 Contains gas under pressure; may explode if heated.  
H 319 Causes serious eye irritation.  
H 336 May cause drowsiness or dizziness.

### R-phrases referred to in Sections 2 and 3

R 11 Highly flammable.  
R 12 Extremely flammable.  
R 36 Irritating to eyes.  
R 67 Vapours may cause drowsiness and dizziness.

### Abbreviations and acronyms

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 Harmonized 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).  
VOC: Volatile Organic Compounds (USA, EU).  
Flam. Gas 1: Flammable gases, Hazard Category 1.  
Flam. Aerosol 1: Flammable aerosols, Hazard Category 1.  
Press. Gas: Gases under pressure: Compressed gas.  
Flam. Liq. 2: Flammable liquids, Hazard Category 2.  
Eye Irrit. 2: Serious eye damage / eye irritation, Hazard Category 2.  
STOT SE 3: Specific target organ toxicity – Single exposure, Hazard Category 3.

### Department issuing MSDS

Product Development / Quality Management

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## Source of the most important information

Safety Data Sheet of the manufacturer.

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## GENERAL HINTS

The information contained herein is based on the present state of our knowledge and on our experiences with the product. The material safety data sheet is strictly intended for risk minimizing when handling the product. The informations characterize it exclusively with regard to safety aspects and does not represent a guarantee of the properties of the product within the meaning of our general terms and conditions. The information does not dispense the user from his duties of care with respect to the observance of present laws, regulations, and terms.

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