

Safety Data Sheet

according to Regulation (EC) No. 1907/2006 (REACH)



Trade name : HOLMENKOL Reflective Marking Spray 150ml
Revision date : 21.12.2015
Print date : 28.07.2016

Version (Revision) : 2.0.0 (1.0.0)

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

HOLMENKOL Reflective Marking Spray 150ml

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

Relevant identified uses

Non-metal-surface treatment products

1.3 Details of the supplier of the safety data sheet

Supplier (manufacturer/importer/only representative/downstream user/distributor)

HOLMENKOL GmbH

Street : Monrepos 7

Postal code/city : D-71634 Ludwigsburg

Telephone : 07141 3894 0

Telefax : 07141 3894 100

Information contact : info@eimermacher.de
www.eimermacher.de

1.4 Emergency telephone number

Giftnotruf Berlin
Charité – Universitätsmedizin Berlin
Campus Benjamin Franklin
Haus VIII, UG
Hindenburgdamm 30
D-12203 Berlin
+49 (0)30-19240, Internat. INFOTRAC +1 3523233500

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Eye Irrit. 2 ; H319 - Serious eye damage/eye irritation : Category 2A ; Causes serious eye irritation.

Aerosol 1 ; H222 - Flammable aerosols : Category 1 ; Extremely flammable aerosol.

Aerosol 1 ; H229 - Flammable aerosols : Category 1 ; Pressurised container: May burst if heated.

2.2 Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms



Flame (GHS02) · Exclamation mark (GHS07)

Signal word

Danger

Hazard statements

H222 Extremely flammable aerosol.
H229 Pressurised container: May burst if heated.
H319 Causes serious eye irritation.

Precautionary statements

P102 Keep out of the reach of children.

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P101	If medical advice is needed, have product container or label at hand.
P210	Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P211	Do not spray on an open flame or other ignition source.
P251	Do not pierce or burn, even after use.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P271	Use only outdoors or in a well-ventilated area.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P410+P412	Protect from sunlight. Do not expose to temperatures exceeding 50°C/122°F.
P501	Dispose of contents/container hazardous or special waste collection point.

2.3 Other hazards

None

SECTION 3: Composition / information on ingredients

3.2 Mixtures

Hazardous ingredients

ETHANOL ; EC No. : 200-578-6; CAS No. : 64-17-5

Weight fraction : $\geq 65 - < 70$ %

Classification 1272/2008 [CLP] : Flam. Liq. 2 ; H225 Eye Irrit. 2 ; H319

Methylacrylic Acid - Ethyl Acrylate Copolymer (1:1) Type A ; CAS No. : 25212-88-8

Weight fraction : $\geq 5 - < 10$ %

Classification 1272/2008 [CLP] : Acute Tox. 4 ; H332

N-BUTYL ACETATE ; EC No. : 204-658-1; CAS No. : 123-86-4

Weight fraction : $\geq 5 - < 10$ %

Classification 1272/2008 [CLP] : Flam. Liq. 3 ; H226 STOT SE 3 ; H336

Further ingredients

ETHANOL ; EC No. : 200-578-6; CAS No. : 64-17-5

Weight fraction : $\geq 65 - < 70$ %

DIMETHYL ETHER ; EC No. : 204-065-8; CAS No. : 115-10-6

Additional information

Full text of R-, H- and EUH-phrases: see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

Following inhalation

Remove casualty to fresh air and keep warm and at rest. No mouth-to-mouth or mouth-to-nose resuscitation. Use Ambu bag or ventilator. In case of respiratory tract irritation, consult a physician. If unconscious place in recovery position and seek medical advice.

In case of skin contact

In case of skin irritation, consult a physician. After contact with skin, wash immediately with plenty of water and soap.

After eye contact

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately. In case of eye irritation consult an ophthalmologist.

After ingestion

Attributable to:

Information to physician

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Treat symptomatically. Symptoms may develop several hours following exposure; medical observation therefore necessary for at least 48 hours.

4.2 Most important symptoms and effects, both acute and delayed

No information available for acute dermal and inhalative toxicity

4.3 Indication of any immediate medical attention and special treatment needed

Special First Aid training necessary.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Carbon dioxide (CO₂) Extinguishing powder Water mist alcohol resistant foam Co-ordinate fire-fighting measures to the fire surroundings.

Unsuitable extinguishing media

Full water jet Strong water jet

5.2 Special hazards arising from the substance or mixture

In case of fire may be liberated: Metal oxide smoke, toxic. Gases/vapours, harmful

5.3 Advice for firefighters

Special protective equipment for firefighters

Use suitable breathing apparatus.

5.4 Additional information

Use caution when applying carbon dioxide in confined spaces. Carbon dioxide can displace oxygen. Caution! Container under pressure. Use water spray jet to protect personnel and to cool endangered containers.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Use personal protection equipment. Remove persons to safety. Remove all sources of ignition. Provide fresh air. Processing vapours can irritate the respiratory tracts, skin and eyes. Observe in addition any national regulations!

6.2 Environmental precautions

Do not allow to enter into surface water or drains. Do not allow to enter into soil/subsoil.

6.3 Methods and material for containment and cleaning up

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Soak up inert absorbent and dispose as waste requiring special attention.

6.4 Reference to other sections

Observe in addition any national regulations! Dispose of waste according to applicable legislation.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Provide adequate ventilation as well as local exhaust at critical locations.

Protective measures

Measures to prevent fire

Do not spray on a naked flame or any incandescent material. Keep away from sources of ignition - No smoking. Keep out of the reach of children. Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50°C. Do not pierce or burn, even after use. Do not open container by force.

7.2 Conditions for safe storage, including any incompatibilities

Hints on joint storage

Storage class (TRGS 510) : 12

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7.3 Specific end use(s)

None

SECTION 8: Exposure controls/personal protection

When using do not smoke. 20 - When using do not eat or drink.

8.1 Control parameters

Occupational exposure limit values

ETHANOL ; CAS No. : 64-17-5

Limit value type (country of origin) : TRGS 900 (D)

Limit value : 500 ppm / 960 mg/m³

Peak limitation : 2(II)

Remark : Y

Version : 02.04.2014

N-BUTYL ACETATE ; CAS No. : 123-86-4

Limit value type (country of origin) : TRGS 900 (D)

Limit value : 62 ppm / 300 mg/m³

Peak limitation : 2(I)

Remark : Y

Version : 02.04.2014

8.2 Exposure controls

Personal protection equipment

When using do not smoke. 20 - When using do not eat or drink. For the protection against direct skin contact, body protective clothing is essential (in addition to the usual working clothes).

Eye/face protection



Skin protection

Hand protection

Wash hands before breaks and after work. Avoid contact with skin, eyes and clothes. 37 - Wear suitable gloves. Before starting work, apply solvent-resistant skincare preparations. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation. Due to missing tests no recommendation to the glove material for the product / preparation / the chemical mixture. Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation. 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. Da das Produkt eine Zubereitung aus mehreren Stoffen darstellt, ist die Beständigkeit von Handschuhmaterial nicht vorausberechenbar und muss deshalb vor dem Einsatz überprüft werden.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance : Aerosol

Safety relevant basis data

Density : (20 °C)

0,99 - 1,01 g/cm³

Maximum VOC content (EC) :

72,5 Wt %

9.2 Other information

None

SECTION 10: Stability and reactivity

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10.1 Reactivity

No information available.

10.2 Chemical stability

Technical measures and the application of suitable work processes have priority over personal protection equipment.

10.3 Possibility of hazardous reactions

Reaction with oxidizing agents possible.

10.4 Conditions to avoid

Bei höhere Temperaturen kann die Spräydose platzen mit (möglicher) Explosion zur Folge. Gefährdete Sprühdosen mit Wassersprühstrahl kühlen.

10.5 Incompatible materials

No information available.

10.6 Hazardous decomposition products

P412 - Do not expose to temperatures exceeding 50°C/122°F.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute effects

Acute oral toxicity

Parameter : LD50 (ETHANOL ; CAS No. : 64-17-5)

Exposure route : Oral

Species : Rat

Effective dose : 21 g/kg

Parameter : LD50 (ETHANOL ; CAS No. : 64-17-5)

Exposure route : Oral

Species : Rabbit

Effective dose : 6300 mg/kg

Parameter : LD50 (N-BUTYL ACETATE ; CAS No. : 123-86-4)

Exposure route : Oral

Species : Rat

Effective dose : 14 g/kg

Parameter : LD50 (N-BUTYL ACETATE ; CAS No. : 123-86-4)

Exposure route : Oral

Species : Rabbit

Effective dose : 7,4 g/kg

Acute dermal toxicity

Parameter : LD50 (ETHANOL ; CAS No. : 64-17-5)

Exposure route : Dermal

Species : Rabbit

Effective dose : 20 g/kg

Acute inhalation toxicity

Parameter : LC50 (N-BUTYL ACETATE ; CAS No. : 123-86-4)

Exposure route : Inhalation

Species : Rat

Effective dose : 2000 ppm

SECTION 12: Ecological information

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Do not allow to enter into surface water or drains.

12.1 Toxicity

Aquatic toxicity

Acute (short-term) fish toxicity

Parameter : LC50 (Methylacrylic Acid - Ethyl Acrylate Copolymer (1:1) Type A ; CAS No. : 25212-88-8)
Species : Brachydanio rerio (zebra-fish)
Evaluation parameter : Acute (short-term) fish toxicity
Effective dose : > 0,5 mg/l
Exposure time : 96 h

Acute (short-term) daphnia toxicity

Parameter : EC50 (Methylacrylic Acid - Ethyl Acrylate Copolymer (1:1) Type A ; CAS No. : 25212-88-8)
Species : Daphnia magna (Big water flea)
Effective dose : > 0,023 mg/l
Exposure time : 48 h

Acute (short-term) algae toxicity

Parameter : EC50 (Methylacrylic Acid - Ethyl Acrylate Copolymer (1:1) Type A ; CAS No. : 25212-88-8)
Species : Desmodesmus subspicatus
Effective dose : > 220 mg/l
Exposure time : 72 h

Chronic (long-term) algae toxicity

Parameter : NOEC (Methylacrylic Acid - Ethyl Acrylate Copolymer (1:1) Type A ; CAS No. : 25212-88-8)
Effective dose : 100 mg/l
Exposure time : 72 h

Sediment toxicity

Toxicity to soil macroorganisms

Acute earthworm toxicity

Chronical earthworm toxicity (reproduction)

Long-term toxicity of organisms living in the sediment

12.2 Persistence and degradability

No information available.

12.3 Bioaccumulative potential

No information available.

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 information available.

12.7 Additional ecotoxicological information

None

SECTION 13: Disposal considerations

13.1 Waste treatment methods

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No information available.

SECTION 14: Transport information

14.1 UN number

UN 1950

14.2 UN proper shipping name

Land transport (ADR/RID)

AEROSOLS

Sea transport (IMDG)

AEROSOLS

Air transport (ICAO-TI / IATA-DGR)

AEROSOLS, FLAMMABLE

14.3 Transport hazard class(es)

Land transport (ADR/RID)

Class(es) : 2

Classification code : 5F

Hazard identification number (Kemler

No.) : 23

Tunnel restriction code : D

Special provisions : LQ 2 · E 0

Hazard label(s) : 2.1

Sea transport (IMDG)

Class(es) : 2.1

EmS-No. : F-D / S-U

Special provisions : LQ 1 I · E 0

Hazard label(s) : 2.1

Air transport (ICAO-TI / IATA-DGR)

Class(es) : 2.1

Special provisions : E 0

Hazard label(s) : 2.1

14.4 Packing group

14.5 Environmental hazards

Land transport (ADR/RID) : No

Sea transport (IMDG) : No

Air transport (ICAO-TI / IATA-DGR) : No

14.6 Special precautions for user

None

SECTION 15: Regulatory information

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

EU legislation

Aerosol directive (75/324/EEC)

National regulations

Water hazard class (WGK)

Class : 1 (Slightly hazardous to water) Classification according to VwVwS

Other regulations, restrictions and prohibition regulations

Betriebssicherheitsverordnung (BetrSichV)

No flammable liquid according to BetrSichV.

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15.2 Chemical Safety Assessment

No information available.

SECTION 16: Other information

16.1 Indication of changes

02. Classification of the substance or mixture · 02. Labelling according to Regulation (EC) No. 1272/2008 [CLP] · 03. Hazardous ingredients · 03. Further ingredients · 07. Hints on joint storage - Storage class · 08. Occupational exposure limit values

16.2 Abbreviations and acronyms

None

16.3 Key literature references and sources for data

None

16.4 Classification for mixtures and used evaluation method according to regulation (EC) 1272/2008 [CLP]

The classification was carried out according to the calculation method of the Preparations Directive (EC 1272/2008).

16.5 Relevant H- and EUH-phrases (Number and full text)

H222	Extremely flammable aerosol.
H225	Highly flammable liquid and vapour.
H226	Flammable liquid and vapour.
H229	Pressurised container: May burst if heated.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H336	May cause drowsiness or dizziness.

16.6 Training advice

None

16.7 Additional information

None

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.