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

. 1.1 Product identifier

. Trade name: **AR Spray** . Article number: 5140-1038

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

No further relevant information available.

. Application of the substance / the mixture . 1.3 Details of the supplier of the safety data sheet . Manufacturer/Supplier: Manufacturer

Graichen Produktions- und Vertiebs-GmbH

Darmstädter Str. 127 - 129 D-64625 Bensheim Tel.: +49(0)6251/73103 Fax: +49(0)6251/77901

e-mail: ehs @graichen-bensheim.de homepage:http//www.graichen.net

. Further information obtainable from: Environment protection department

Advice centre for poisoning university Mainz phone +49(0)6131/19240 or poison information:+49(0)700/GIFTINFO . 1.4 Emergency telephone number:

#### **SECTION 2: Hazards identification**

## . 2.1 Classification of the substance or mixture

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



GHS02 flame

Flam. Aerosol 1 H222-H229 Extremely flammable aerosol. Pressurised container: May burst if heated.

Classification according to Directive 67/548/EEC or Directive 1999/45/EC

F+; Extremely flammable

R12: Extremely flammable. 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.

. 2.2 Label elements

. Labelling according to Regulation (EC) No

1272/2008

. Hazard pictograms

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



GHS02

. Signal word Danger

. Hazard statements H222-H229 Extremely flammable aerosol. Pressurised container: May burst if

heated.

Keep out of reach of children. P102 . Precautionary statements

P210 Keep away from heat/sparks/open flames/hot surfaces. - No smoking.

P211 Do not spray on an open flame or other ignition source. P251 Pressurized container: Do not pierce or burn, even after use.

P410+P412 Protect from sunlight. Do not expose to temperatures exceeding 50

°C/122 °F

. Additional information: Buildup of explosive mixtures possible without sufficient ventilation.

. 2.3 Other hazards

. Results of PBT and vPvB assessment

Not applicable. . PBT: . vPvB: Not applicable.

#### **SECTION 3: Composition/information on ingredients**

. 3.2 Chemical characterisation: Mixtures

Active substance with propellant . Description:

. Dangerous components:

CAS: 106-97-8 butane (containing < 0,1 % butadiene (106-99-0))

EINECS: 203-448-7

🥉 F+ R12 Flam. Gas 1, H220; Press. Gas, H280

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25-50%

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	(C	ontd. of page 1)
CAS: 74-98-6	propane	10-25%
EINECS: 200-827-9		
	Flam. Gas 1, H220; Press. Gas, H280	
CAS: 75-28-5	isobutane (containing < 0,1 % butadiene (106-99-0))	2.5-10%
EINECS: 200-857-2	<b>6</b> F+ R12	
	爾 Flam. Gas 1, H220; Press. Gas, H280	

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

#### **SECTION 4: First aid measures**

. 4.1 Description of first aid measures

. After inhalation: Supply fresh air; consult doctor in case of complaints.

After skin contact: Wash with water and soap and rinse thoroughly

. After eye contact: Rinse opened eye for several minutes under running water.

. After swallowing: Seek immediate medical advice.

4.2 Most important symptoms and effects, both acute and delayed

No further relevant information available.

4.3 Indication of any immediate medical

attention and special treatment needed No further relevant information available.

# **SECTION 5: Firefighting measures**

. 5.1 Extinguishing media

. Suitable extinguishing agents: CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant

foam.

CO2, sand, extinguishing powder. Do not use water.

. For safety reasons unsuitable extinguishing agents:

. 5.2 Special hazards arising from the

substance or mixture

5.3 Advice for firefighters

5.3 Advice for firefightersProtective equipment:

Water with full jet

No further relevant information available.

No special measures required.

## **SECTION 6: Accidental release measures**

. 6.1 Personal precautions, protective

equipment and emergency procedures Keep away from ignition sources.

. 6.2 Environmental precautions:

Do not allow product to reach sewage system or any water course.

Inform respective authorities in case of seepage into water course or sewage

system.

. 6.3 Methods and material for containment and cleaning up:

Ensure adequate ventilation.

Do not flush with water or aqueous cleansing agents **6.4 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.

# **SECTION 7: Handling and storage**

. 7.1 Precautions for safe handling

. Information about fire - and explosion

protection:

Open and handle receptacle with care.

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.

### . 7.2 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 one common storage facility:

. Further information about storage

conditions:

Do not store together with oxidising and acidic materials.

Keep container tightly sealed.

Store in cool, dry conditions in well sealed receptacles.

Protect from heat and direct sunlight. No further relevant information available.

# . 7.3 Specific end use(s)

# SECTION 8: Exposure controls/personal protection

. Additional information about design of technical facilities:

No further data; see item 7.

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#### 8.1 Control parameters

. Ingredients with limit values that require monitoring at the workplace:

106-97-8 butane (containing ≤ 0,1 % butadiene (106-99-0))

WEL 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)

The lists valid during the making were used as basis. . Additional information:

. 8.2 Exposure controls

Personal protective equipment:

General protective and hygienic

measures: Wash hands before breaks and at the end of work.

. Respiratory protection: . Protection of hands: Use suitable respiratory protective device in case of insufficient ventilation.

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

. 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 goggles

# **SECTION 9: Physical and chemical properties**

## . 9.1 Information on basic physical and chemical properties

. General Information

. Appearance:

Fluid Form: Colourless Colour: . Odour: Characteristic . Odour threshold: Not determined. . pH-value: Not determined.

. Change in condition

Boiling point/Boiling range: Not applicable, as aerosol.

. Flash point: -97 °C

. Flammability (solid, gaseous): Not applicable.

. 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.

. Explosion limits:

1.5 Vol % Lower: Upper: 10.9 Vol % . Vapour pressure at 20 °C: 8300 hPa . Density at 20 °C: 0.6332 g/cm3 . Relative density Not determined. Vapour density Not determined. . Evaporation rate Not applicable.

. Solubility in / Miscibility with

Insoluble. water:

. Partition coefficient (n-octanol/water): Not determined.

Viscosity:

Dynamic: Not determined. Kinematic: Not determined.

Solvent content:

Organic solvents:

. 9.2 Other information No further relevant information available.

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# **SECTION 10: Stability and reactivity**

. 10.1 Reactivity

10.2 Chemical stability

Thermal decomposition / conditions to be

avoided:

No decomposition if used according to specifications. No dangerous reactions known.

10.3 Possibility of hazardous reactions

. 10.4 Conditions to avoid No further relevant information available. . 10.5 Incompatible materials: No further relevant information available.

10.6 Hazardous decomposition

Hazardous thermal decomposition products may include: Formaldehyde, Carbon products:

dioxide, Carbon monoxide, Methanol

## **SECTION 11: Toxicological information**

. 11.1 Information on toxicological effects

. Acute toxicity:

. Primary irritant effect:

. on the skin: No irritant effect. . on the eye: Irritating effect.

. Sensitisation: No sensitising effects known.

#### **SECTION 12: Ecological information**

. 12.1 Toxicity

. Aquatic toxicity: No further relevant information available. . 12.2 Persistence and degradability No further relevant information available. . 12.3 Bioaccumulative potential No further relevant information available. . 12.4 Mobility in soil No further relevant information available.

. Additional ecological information:

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous . General notes:

for water

Do not allow undiluted product or large quantities of it to reach ground water, water

course or sewage system.

. 12.5 Results of PBT and vPvB assessment

. PBT: Not applicable. . vPvB: Not applicable.

. 12.6 Other adverse effects No further relevant information available.

## **SECTION 13: Disposal considerations**

. 13.1 Waste treatment methods

 Recommendation Must not be disposed together with household garbage. Do not allow product to

reach sewage system. For empty packaging

EU-waste cataloque: 15 01 04

Metallic packaging

. Uncleaned packaging:

. European waste catalogue

. Recommendation: Disposal must be made according to official regulations.

# **SECTION 14: Transport information**

. 14.1 UN-Number

. ADR, IMDG, IATA UN1950

. 14.2 UN proper shipping name . ADR 1950 AEROSOLS . IMDG **AEROSOLS** 

. IATA AEROSOLS, flammable

. 14.3 Transport hazard class(es)

ADR



Class 5F Gases. Label

. IMDG, IATA



Class . Label

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Warning: Gases.

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. 14.4 Packing group

. ADR, IMDG, IATA . 14.5 Environmental hazards:

. Marine pollutant:

. 14.6 Special precautions for user . Danger code (Kemler):

F-D,S-U . EMS Number:

14.7 Transport in bulk according to Annex II of

MARPOL73/78 and the IBC Code Not applicable.

Transport/Additional information:

. ADR

. Limited quantities (LQ)

. Excepted quantities (EQ)

. Transport category . Tunnel restriction code

. Limited quantities (LQ) . Excepted quantities (ÉQ)

. UN "Model Regulation":

D

Void

Code: E0 Not permitted as Excepted Quantity

1L Code: E0

Not permitted as Excepted Quantity

UN1950, AEROSOLS, 2.1

# **SECTION 15: Regulatory information**

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

. National regulations:

Chars Share in %

Water hazard class 1 (Self-assessment): slightly hazardous for water. . Waterhazard class:

. 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

## **SECTION 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.

. Department issuing MSDS:

Environment protection department.

. 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

INTA: International Air Transport Association
GHS: Globally Harmonised 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)
Flam. Gas 1: Flammable gases, Hazard Category 1
Flam. Aerosol 1: Flammable aerosols, Hazard Category 1
Press. Gas: Gases under pressure: Compressed gas

\* Data compared to the previous version

altered.