

Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 21.10.2014

Version number 1404

Revision: 21.10.2014

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 against

Application of the substance / the mixture: Lubricant
 No further relevant information available.

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

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

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.

Precautionary statements

P102 Keep out of reach of children.
 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

PBT:

Not applicable.

vPvB:

Not applicable.

SECTION 3: Composition/information on ingredients

3.2 Chemical characterisation: Mixtures

Description: Active substance with propellant

Dangerous components:

CAS: 106-97-8	butane (containing ≤ 0,1 % butadiene (106-99-0))	25-50%
EINECS: 203-448-7	F+ R12	
	Flam. Gas 1, H220; Press. Gas, H280	

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

. 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.
- . For safety reasons unsuitable extinguishing agents: CO₂, sand, extinguishing powder. Do not use water.

- . Water with full jet

5.2 Special hazards arising from the substance or mixture

No further relevant information available.

5.3 Advice for firefighters

- . Protective equipment: 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.

6.4 Reference to other sections

Do not flush with water or aqueous cleansing agents
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:

Do not store together with oxidising and acidic materials.

- . Further information about storage conditions:

Keep container tightly sealed.

Store in cool, dry conditions in well sealed receptacles.

Protect from heat and direct sunlight.

7.3 Specific end use(s)

No further relevant information available.

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 $\leq 0,1$ % butadiene (106-99-0))

WEL	Short-term value: 1810 mg/m ³ , 750 ppm Long-term value: 1450 mg/m ³ , 600 ppm Carc (if more than 0.1% of buta-1.3-diene)
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. Additional information: The lists valid during the making were used as basis.

8.2 Exposure controls

. Personal protective equipment:

. General protective and hygienic measures:

. Respiratory protection:

. Protection of hands:

Wash hands before breaks and at the end of work.

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:

Form:

Fluid

Colour:

Colourless

. 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:

Lower:

1.5 Vol %

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 water:

Insoluble.

. Partition coefficient (n-octanol/water):

Not determined.

. Viscosity:

Dynamic:

Not determined.

Kinematic:

Not determined.

. Solvent content:

Organic solvents:

70.5 %

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.
- . 10.3 Possibility of hazardous reactions No dangerous reactions known.
- . 10.4 Conditions to avoid No further relevant information available.
- . 10.5 Incompatible materials: No further relevant information available.
- . 10.6 Hazardous decomposition products: Hazardous thermal decomposition products may include: Formaldehyde, Carbon 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:
- . General notes: Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous 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.
- . European waste catalogue: For empty packaging
EU-waste catalogue: 15 01 04
Metallic packaging
- . Uncleaned packaging:
- . 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 2 5F Gases.
- . Label 2.1

 . IMDG, IATA


- . Class 2.1
- . Label 2.1

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- . **14.4 Packing group**
 . ADR, IMDG, IATA Void
- . **14.5 Environmental hazards:**
 . Marine pollutant: No
- . **14.6 Special precautions for user**
 . Danger code (Kemler): Warning: Gases.
 . EMS Number: -
 . F-D,S-U
- . **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) 1L
 . Excepted quantities (EQ) Code: E0
 Not permitted as Excepted Quantity
- . Transport category 2
 . Tunnel restriction code D
-
- . IMDG
 . Limited quantities (LQ) 1L
 . Excepted quantities (EQ) Code: E0
 Not permitted as Excepted Quantity
- . UN "Model Regulation": UN1950, AEROSOLS, 2.1

SECTION 15: Regulatory information

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

. National regulations:

Class	Share in %
1R	50-100

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

. **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
 IATA: 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.