

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

### 1.1 Product identifier

Trade name: **MolyGold ARMA SR**

Article number: 055202MLG

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

No further relevant information available.

### Application of the substance / the mixture

Spray

Cleaning agent/ Cleaner

### 1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier:

MolyGold Lubricants GmbH

Member of ECCO GROUP

Salzsteinstraße 4

D-82402 Seeshaupt

Tel.: +49-(0)8801-9710

Fax: +49-(0)8801-9730

www.molygold.com

info@molygold.com

Further information obtainable from: sd@molygold.com

1.4 Emergency telephone number: Please call toxicological emergency in case of need.

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008



GHS02

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

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

### Hazard pictograms



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.

### 2.3 Other hazards

#### Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

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## SECTION 3: Composition/information on ingredients

### 3.2 Chemical characterisation: Mixtures

Description: Aqueous cleaner with surfactants and additives

#### Dangerous components:

CAS: 106-97-8 EINECS: 203-448-7 Reg.nr.: 01-2119474691-32-	Propellant butane	F+ R12 Flam. Gas 1, H220; Press. Gas C, H280	2.5-10%
CAS: 74-98-6 EINECS: 200-827-9 Reg.nr.: 01-2119486944-21	Propellant propane	F+ R12 Flam. Gas 1, H220; Press. Gas C, H280	2.5-10%

#### Regulation (EC) No 648/2004 on detergents / Labelling for contents

aliphatic hydrocarbons	5 - 15%
anionic surfactants, perfumes	< 5%

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

General information: Take affected persons out into the fresh air.

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

After skin contact:

Immediately wash with water and soap and rinse thoroughly.

If skin irritation continues, consult a doctor.

After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.

After swallowing: Do not induce vomiting; call for medical help immediately.

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: Use fire extinguishing methods suitable to surrounding conditions.

5.2 Special hazards arising from the substance or mixture Do not breathe gases and smokes from fire

### 5.3 Advice for firefighters

Protective equipment:

Mount respiratory protective device.

Wear fully protective suit.

## SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

Keep away from ignition sources.

### 6.2 Environmental precautions:

Do not allow to enter sewers/ surface or ground water.

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

### 6.3 Methods and material for containment and cleaning up:

Absorb liquid components with liquid-binding material.

### 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

Open and handle receptacle with care.

Use only in well ventilated areas.

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**Information about fire - and explosion protection:**

Protect against electrostatic charges.  
Keep respiratory protective device available.  
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.  
Prevent any seepage into the ground.

**Information about storage in one common storage facility:** Not required.

**Further information about storage conditions:** 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.

**8.1 Control parameters****Ingredients with limit values that require monitoring at the workplace:****106-97-8 Propellant butane (2.5-10%)**

WEL	Short-term value: 1810 mg/m <sup>3</sup> , 750 ppm Long-term value: 1450 mg/m <sup>3</sup> , 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:**

The usual precautionary measures are to be adhered to when handling chemicals.  
Do not inhale gases / fumes / aerosols.

**Respiratory protection:** Not required.

**Protection of hands:**

Protective gloves

**Material of gloves**

Nitrile rubber, NBR

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:**

Safety glasses

**SECTION 9: Physical and chemical properties****9.1 Information on basic physical and chemical properties****General Information****Appearance:**

<b>Form:</b>	Aerosol
<b>Colour:</b>	Whitish
<b>Odour:</b>	Characteristic
<b>Odour threshold:</b>	Not determined.

<b>pH-value at 20 °C:</b>	8.8
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**Change in condition**

<b>Melting point/Melting range:</b>	Undetermined.
<b>Boiling point/Boiling range:</b>	Undetermined.

<b>Flash point:</b>	< 0 °C
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<b>Flammability (solid, gaseous):</b>	Not applicable.
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<b>Decomposition temperature:</b>	Not determined.
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<b>Self-igniting:</b>	Not determined.
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<b>Danger of explosion:</b>	Product is not explosive. However, formation of explosive air/vapour mixtures are possible.
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**Explosion limits:**

<b>Lower:</b>	1.7 Vol %
<b>Upper:</b>	9.4 Vol %

<b>Vapour pressure:</b>	Not determined.
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<b>Density at 20 °C:</b>	0.88 g/cm <sup>3</sup>
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<b>Relative density</b>	Not determined.
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<b>Vapour density</b>	Not determined.
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<b>Evaporation rate</b>	Not applicable.
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<b>Solubility in / Miscibility with water:</b>	Easily soluble.
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<b>Partition coefficient (n-octanol/water):</b>	Not determined.
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**Viscosity:**

<b>Dynamic:</b>	Not determined.
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<b>Kinematic:</b>	Not determined.
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<b>9.2 Other information</b>	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 and stored according to specifications.

**10.3 Possibility of hazardous reactions** Danger of sprays bursting because of high vapour pressure when heated.

**10.4 Conditions to avoid** No further relevant information available.

**10.5 Incompatible materials:** Not applicable.

**10.6 Hazardous decomposition products:**

Flammable gases/vapours  
Hydrocarbons, CO, CO<sub>2</sub>

**SECTION 11: Toxicological information****11.1 Information on toxicological effects****Acute toxicity:****LD/LC50 values relevant for classification:****106-97-8 Propellant butane**

Inhalative	CL50	658 ppm (Rat) (4h)
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**Primary irritant effect:**

**on the skin:** No irritant effects known

**on the eye:** Weakly irritant

**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.

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- **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 (Self-assessment): slightly hazardous for water  
Do not allow product 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**  
15 01 04 metallic packaging
- **Uncleaned packaging:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

**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
- **14.4 Packing group**  
ADR, IMDG, IATA Void
- **14.5 Environmental hazards:**  
Marine pollutant: No
- **14.6 Special precautions for user** Warning: Gases.  
Danger code (Kemler): -  
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

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|-----------------------------------|--|
| · <b>Excepted quantities (EQ)</b> | Code: E0<br>Not permitted as Excepted Quantity |
| · <b>UN "Model Regulation":</b>   | UN1950, AEROSOLS, 2.1                          |

**SECTION 15: Regulatory information**

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
  - **National regulations:**
  - **Technical instructions (air):**
- | Class | Share in % |
|-------|------------|
| NK    | 14.0       |
- **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.
- **Relevant phrases**  
H220 Extremely flammable gas.  
H280 Contains gas under pressure; may explode if heated.  
R12 Extremely flammable.
  - **Department issuing MSDS:** see item 1
  - **Abbreviations and acronyms:**  
Flam. Gas 1: Flammable gases, Hazard Category 1  
Flam. Aerosol 1: Flammable aerosols, Hazard Category 1  
Press. Gas C: Gases under pressure: Compressed gas
  - **\* Data compared to the previous version altered.**

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