

Globally Harmonized System of Classification and Labelling of  
Chemicals (GHS)

**METALURE A-41510 MB**

Version 1.0

Revision Date 27.04.2023

Print Date 28.04.2023

**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1 Product identifier**

Trade name : METALURE A-41510 MB  
Material number : 027449IA0

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

This information is not available.

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

Company : ECKART GmbH  
Guentersthal 4  
91235 Hartenstein  
Telephone : +499152770  
Telefax : +499152777008  
E-mail address : msds.eckart@altana.com  
Responsible/issuing person

**1.4 Emergency telephone number****NCEC:**

(contract no.: ECKART29003-NCEC)

+44 1235 239671 (Middle East/Africa, call and response in your language)

+1 215 207 0061 (Americas, call and response in your language)

+65 3158 1074 (Asia-Pacific, call and response in your language)

**SECTION 2: Hazards identification****GHS Classification**

: Flammable liquids, Category 2, H225  
Serious eye damage/eye irritation, Category 2A, H319

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**GHS-Labeling**

Symbol(s)



Signal word

: Danger

Hazard statements

 : H225: Highly flammable liquid and vapour.  
 H319: Causes serious eye irritation.

Precautionary statements

: **Prevention:**

P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

P233 Keep container tightly closed.

P240 Ground and bond container and receiving equipment.

P241 Use explosion-proof electrical/ ventilating/ lighting equipment.

P242 Use non-sparking tools.

P243 Take action to prevent static discharges.

P264 Wash skin thoroughly after handling.

P280 Wear protective gloves/ protective clothing/ eye protection/ face protection/ hearing protection.

**Response:**

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse affected areas with water.

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337 + P317 If eye irritation persists: Get medical help.

P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish.

**Storage:**

P403 + P235 Store in a well-ventilated place. Keep cool.

**Disposal:**

P501 Dispose of contents/ container to an approved waste disposal plant.

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**Hazardous components which must be listed on the label**

### SECTION 3: Composition/information on ingredients

Substance No. :

#### Hazardous components

Chemical name	CAS-No. EINECS-No.	Classification and labelling	Concentration[%]
3-methoxy-3-methylbutan-1-ol	56539-66-3 260-252-4	Flam. Liq.;4;H227 ;2B;H320	50 - 100
aluminium	7429-90-5 231-072-3	Flam. Sol.;1;H228	10 - 20
acetone	67-64-1 200-662-2	Flam. Liq.;2;H225 Acute Tox.;5;H303 Acute Tox.;5;H313 ;2A;H319 STOT SE;3;H336	1 - 10

For the full text of the H-Statements mentioned in this Section, see Section 16.

### SECTION 4: First aid measures

#### 4.1 Description of first aid measures

General advice : Move the victim to fresh air.  
Move out of dangerous area.  
Show this safety data sheet to the doctor in attendance.

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If inhaled	Do not leave the victim unattended. : Remove to fresh air. If unconscious, place in recovery position and seek medical advice. If symptoms persist, call a physician.
In case of skin contact	: Wash off immediately with soap and plenty of water. If on clothes, remove clothes.
In case of eye contact	: Immediately flush eye(s) with plenty of water. Immediately flush eye(s) with plenty of water. Remove contact lenses. Keep eye wide open while rinsing. If eye irritation persists, consult a specialist.
If swallowed	: Keep respiratory tract clear. Do not give milk or alcoholic beverages. Never give anything by mouth to an unconscious person. If symptoms persist, call a physician.

**4.2 Most important symptoms and effects, both acute and delayed**

This information is not available.

**4.3 Indication of any immediate medical attention and special treatment needed**

This information is not available.

**SECTION 5: Firefighting measures**
**5.1 Extinguishing media**

Suitable extinguishing media	: Dry sand, ABC powder, Foam
Unsuitable extinguishing media	: High volume water jet, Carbon dioxide (CO <sub>2</sub> )
	High volume water jet

**5.2 Special hazards arising from the substance or mixture**

Specific hazards during firefighting	: Do not allow run-off from fire fighting to enter drains or water courses.
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**5.3 Advice for firefighters**

- Special protective equipment for firefighters : Wear self-contained breathing apparatus for firefighting if necessary.
- Further information : Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations. For safety reasons in case of fire, cans should be stored separately in closed containments. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Use a water spray to cool fully closed containers.

**SECTION 6: Accidental release measures****6.1 Personal precautions, protective equipment and emergency procedures**

- Personal precautions : Evacuate personnel to safe areas.  
Use personal protective equipment.  
Ensure adequate ventilation.  
Remove all sources of ignition.  
Evacuate personnel to safe areas.  
Beware of vapours accumulating to form explosive concentrations. Vapours can accumulate in low areas.

**6.2 Environmental precautions**

- Environmental precautions : The product should not be allowed to enter drains, water courses or the soil.
- Prevent product from entering drains.  
Prevent further leakage or spillage if safe to do so.  
If the product contaminates rivers and lakes or drains inform respective authorities.

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**6.3 Methods and materials for containment and cleaning up**

Methods for cleaning up : Use mechanical handling equipment.  
Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).  
Contain spillage, and then collect with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).

**6.4 Reference to other sections**

For personal protection see section 8.

**SECTION 7: Handling and storage****7.1 Precautions for safe handling**

Advice on safe handling : Avoid formation of aerosol. Do not breathe vapours/dust.  
Avoid contact with skin and eyes. For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area. Take precautionary measures against static discharges. Provide sufficient air exchange and/or exhaust in work rooms. Open drum carefully as content may be under pressure. Dispose of rinse water in accordance with local and national regulations.

Advice on protection against fire and explosion : Do not spray on a naked flame or any incandescent material.  
Take necessary action to avoid static electricity discharge (which might cause ignition of organic vapours). Use only explosion-proof equipment. Keep away from open flames, hot surfaces and sources of ignition.

Hygiene measures : When using do not eat or drink. When using do not smoke.  
Wash hands before breaks and at the end of workday.

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

Requirements for storage areas and containers : Earthing of containers and apparatuses is essential. Reaction with water liberates extremely flammable gas (hydrogen) Take measures to prevent the build up of electrostatic charge. Use

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explosion-proof equipment. Store in original container. Keep containers tightly closed in a cool, well-ventilated place. Keep away from sources of ignition - No smoking. Keep container closed when not in use.

No smoking. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Observe label precautions. Electrical installations / working materials must comply with the technological safety standards.

Further information on storage conditions : Protect from humidity and water.

Advice on common storage : Do not store near acids. Do not store together with oxidizing and self-igniting products. Never allow product to get in contact with water during storage. Keep away from oxidizing agents, strongly alkaline and strongly acid materials in order to avoid exothermic reactions.

Other data : No decomposition if stored and applied as directed.

**7.3 Specific end use(s)**

This information is not available.

**SECTION 8: Exposure controls/personal protection**
**8.1 Control parameters**
**Germany:**

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Update	Basis
aluminium	7429-90-5	AGW (Inhalable fraction)	10 mg/m <sup>3</sup>	2021-07-02	DE TRGS 900

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Peak-limit: excursion factor (category)		2;(II)			
Further information		When there is compliance with the OEL and biological tolerance values, there is no risk of harming the unborn child			
aluminium	7429-90-5	AGW (Alveolate fraction)	1,25 mg/m <sup>3</sup>	2021-07-02	DE TRGS 900
Peak-limit: excursion factor (category)		2;(II)			
Further information		When there is compliance with the OEL and biological tolerance values, there is no risk of harming the unborn child			
acetone	67-64-1	TWA	500 ppm 1 210 mg/m <sup>3</sup>	2000-06-16	2000/39/EC
Further information		Indicative			
acetone	67-64-1	AGW	500 ppm 1 200 mg/m <sup>3</sup>	2015-03-02	DE TRGS 900
Peak-limit: excursion factor (category)		2;(I)			
Further information		Commission for dangerous substances Senate commission for the review of compounds at the work place dangerous for the health (MAK-commission). European Union (The EU has established a limit value: deviations in value and peak limit are possible) When there is compliance with the OEL and biological tolerance values, there is no risk of harming the unborn child			

**United States of America (USA):**

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Update	Basis
aluminium	7429-90-5	TWA (total dust)	50 Million particles per cubic foot	2012-07-01	
aluminium	7429-90-5	TWA (Respirable)	5 mg/m <sup>3</sup>	2013-10-08	
aluminium	7429-90-5	TWA (total dust)	15 mg/m <sup>3</sup>	2012-07-01	
aluminium	7429-90-5	TWA (total)	10 mg/m <sup>3</sup>	2013-10-08	
aluminium	7429-90-5	TWA (respirable fraction)	5 mg/m <sup>3</sup>	2012-07-01	
aluminium	7429-90-5	TWA (respirable fraction)	15 Million particles per cubic foot	2012-07-01	



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aluminium	7429-90-5	PEL (Total dust)	10 mg/m <sup>3</sup>	2014-11-26	
aluminium	7429-90-5	PEL (respirable dust fraction)	5 mg/m <sup>3</sup>	2014-11-26	
aluminium	7429-90-5	TWA (Respirable particulate matter)	1 mg/m <sup>3</sup>	2008-01-01	
aluminium	7429-90-5	TWA	5 mg/m <sup>3</sup>	2005-09-01	
aluminium	7429-90-5	TWA (Total)	15 mg/m <sup>3</sup>	1989-01-19	
aluminium	7429-90-5	TWA (Respirable fraction)	5 mg/m <sup>3</sup>	1989-01-19	
aluminium	7429-90-5	TWA (total dust)	15 mg/m <sup>3</sup>	2011-07-01	
aluminium	7429-90-5	TWA (respirable fraction)	5 mg/m <sup>3</sup>	2011-07-01	
aluminium	7429-90-5	TWA (Total dust)	15 mg/m <sup>3</sup>	1989-01-19	
aluminium	7429-90-5	TWA (respirable dust fraction)	5 mg/m <sup>3</sup>	1989-01-19	
aluminium	7429-90-5	TWA (welding fumes)	5 mg/m <sup>3</sup>	2013-10-08	
aluminium	7429-90-5	TWA (pyro powders)	5 mg/m <sup>3</sup>	2013-10-08	
aluminium	7429-90-5	TWA (Respirable particulate matter)	1 mg/m <sup>3</sup>	2013-03-01	
aluminium	7429-90-5	TWA (Fumes)	5 mg/m <sup>3</sup>	1989-01-19	
aluminium	7429-90-5	PEL (Welding fumes)	5 mg/m <sup>3</sup>	2017-10-02	
aluminium	7429-90-5	PEL (Pyro powders)	5 mg/m <sup>3</sup>	2017-10-02	
aluminium	7429-90-5	TWA (powder)	5 mg/m <sup>3</sup>	1989-01-19	
acetone	67-64-1	TWA	250 ppm	2016-03-01	
acetone	67-64-1	STEL	500 ppm	2016-03-01	
acetone	67-64-1	TWA	250 ppm 590 mg/m <sup>3</sup>	2013-10-08	
acetone	67-64-1	TWA	1 000 ppm 2 400 mg/m <sup>3</sup>	1997-08-04	
acetone	67-64-1	TWA	750 ppm 1 800 mg/m <sup>3</sup>	1989-01-19	

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acetone	67-64-1	STEL	1 000 ppm 2 400 mg/m <sup>3</sup>	1989-01-19	
acetone	67-64-1	STEL	750 ppm 1 780 mg/m <sup>3</sup>	2014-11-26	
acetone	67-64-1	C	3 000 ppm	2014-11-26	
acetone	67-64-1	PEL	500 ppm 1 200 mg/m <sup>3</sup>	2014-11-26	

## 8.2 Exposure controls

### Personal protective equipment

- Eye protection : Goggles  
 : Tightly fitting safety goggles  
 Wear face-shield and protective suit for abnormal processing problems.
- Hand protection
- Material : Solvent-resistant gloves (butyl-rubber)
- Remarks : Take note of the information given by the producer concerning permeability and break through times, and of special workplace conditions (mechanical strain, duration of contact).  
 The exact break through time can be obtained from the protective glove producer and this has to be observed.  
 Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time.  
 Recommended preventive skin protection  
 Skin should be washed after contact.  
 The suitability for a specific workplace should be discussed with the producers of the protective gloves.  
 : The suitability for a specific workplace should be discussed with the producers of the protective gloves.
- Skin and body protection : Impervious clothing

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Respiratory protection : Choose body protection according to the amount and concentration of the dangerous substance at the work place.  
: Use suitable breathing protection if workplace concentration requires.

**Environmental exposure controls**

General advice : The product should not be allowed to enter drains, water courses or the soil.  
: Prevent product from entering drains.  
Prevent further leakage or spillage if safe to do so.  
If the product contaminates rivers and lakes or drains inform respective authorities.

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

Appearance : viscous  
Colour : silver  
Odour : characteristic  
pH : substance/mixture is non-soluble (in water)  
Freezing point : No data available  
Boiling point/boiling range : 174 °C  
Flash point : 15 °C  
  
Bulk density : No data available  
Flammability (solid, gas) : No data available  
Auto-flammability : No data available  
Upper explosion limit : No data available  
Lower explosion limit : No data available  
Vapour pressure : No data available

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Density	: 1,11 g/cm <sup>3</sup>
Solubility(ies)	
Water solubility	: insoluble
Miscibility with water	: immiscible
Solubility in other solvents	: No data available
Partition coefficient: n-octanol/water	: No data available
Ignition temperature	: No data available
Thermal decomposition	: No data available
Viscosity, dynamic	: No data available
Viscosity, kinematic	: No data available
Flow time	: No data available

**9.2 Other information**

No data available

**SECTION 10: Stability and reactivity****10.1 Reactivity**

No decomposition if stored and applied as directed.

**10.2 Chemical stability**

No decomposition if stored and applied as directed.

**10.3 Possibility of hazardous reactions**

Hazardous reactions : Contact with acids and alkalis may release hydrogen.

No decomposition if stored and applied as directed.

Vapours may form explosive mixture with air.

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**10.4 Conditions to avoid**

Conditions to avoid : Do not allow evaporation to dryness.  
Heat, flames and sparks.

**10.5 Incompatible materials**

Materials to avoid : Acids  
Bases  
Oxidizing agents

**10.6 Hazardous decomposition products**

Other information : No data available

**SECTION 11: Toxicological information****11.1 Information on toxicological effects****Acute toxicity****Components:****acetone :**

Acute oral toxicity : LD50 Rabbit: 4 700 - 5 800 mg/kg

Mouse: 3 000 mg/kg

Rat: 9 800 mg/kg

Acute inhalation toxicity : LC50 Rat: 76 mg/l

Exposure time: 4 h

Test atmosphere: vapour

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Acute dermal toxicity : LD50 Rabbit: > 2 000 mg/kg

**Skin corrosion/irritation****Product**

May cause skin irritation in susceptible persons.

**Serious eye damage/eye irritation****Product**

May cause irreversible eye damage.

**Respiratory or skin sensitisation**

No data available

**Carcinogenicity**

No data available

**Toxicity to reproduction/fertility**

No data available

**Reprod.Tox./Development/Teratogenicity**

No data available

**STOT - single exposure**

No data available

**STOT - repeated exposure**

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No data available

**Aspiration toxicity**

No data available

**Further information****Product**

Solvents may degrease the skin.

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**SECTION 12: Ecological information****12.1 Toxicity****Components:****acetone (67-64-1) :**

Toxicity to daphnia and other : (Daphnia magna (Water flea)): 21 600 mg/l  
aquatic invertebrates

**12.2 Persistence and degradability**

No data available

**12.3 Bioaccumulative potential**

No data available

**12.4 Mobility in soil**

No data available

**12.5 Results of PBT and vPvB assessment**

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No data available

**12.6 Other adverse effects****Product:**

Additional ecological information : No data available

**SECTION 13: Disposal considerations****13.1 Waste treatment methods**

Product : Do not dispose of waste into sewer.  
Do not contaminate ponds, waterways or ditches with chemical or used container.  
Send to a licensed waste management company.

Contaminated packaging : Empty remaining contents.  
Dispose of as unused product.  
Do not re-use empty containers.  
Do not burn, or use a cutting torch on, the empty drum.

**SECTION 14: Transport information****14.1 UN number**

ADR : 1263  
TDG : 1263  
CFR : 1263  
IMDG : 1263  
IATA : 1263

**14.2 Proper shipping name**



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**ADR** : PAINT  
**TDG** : PAINT  
**CFR** : PAINT  
**IMDG** : PAINT Classified according to 2.3.2.2 IMDG-Code  
**IATA** : PAINT classified according to 3.3.3.1 IATA-DGR

**14.3 Transport hazard class**

**ADR** : 3  
**TDG** : 3  
**CFR** : 3  
**IMDG** : 3  
**IATA** : 3

**14.4 Packing group**

**ADR**  
Packaging group : III  
Classification Code : F1  
Hazard Identification Number : 30  
Labels : 3  
Tunnel restriction code : (D/E)

**TDG**  
Packaging group : III  
Labels : 3

**CFR**  
Packaging group : III  
Labels : 3

**IMDG**  
Packaging group : III

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Labels : 3

### IATA

Packing instruction (cargo aircraft) : 366

Packing instruction (passenger aircraft) : 355

Packing instruction (LQ) : Y344

Packaging group : III

Labels : 3

### 14.5 Environmental hazards

### 14.6 Special precautions for user

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

No data available

## SECTION 15: Regulatory information

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

REACH - Candidate List of Substances of Very High Concern for Authorisation (Article 59) : Not applicable

REACH - List of substances subject to authorisation (Annex XIV) : Not applicable

Regulation (EC) No 1005/2009 on substances that deplete the ozone layer : Not applicable

Regulation (EU) 2019/1021 on persistent organic pollutants (recast) : Not applicable

REACH - Restrictions on the manufacture, placing on :

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the market and use of certain dangerous substances,  
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REACH - Restrictions on the manufacture, placing on  
the market and use of certain dangerous substances,  
mixtures and articles (Annex XVII)

: Banned and/or restricted  
(3-methoxy-3-methylbutan-1-ol)  
(aluminium powder (stabilised))  
(acetone)

**15.2 Chemical safety assessment**

No data available

**SECTION 16: Other information****Full text of H-Statements**

H225	: Highly flammable liquid and vapour.
H227	: Combustible liquid.
H228	: Flammable solid.
H303	: May be harmful if swallowed.
H313	: May be harmful in contact with skin.
H319	: Causes serious eye irritation.
H320	: Causes eye irritation.
H336	: May cause drowsiness or dizziness.

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

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