SAFETY DATA SHEET
according to Regulation (EC) No. 1907/2006

METALURE L-55700

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

1.1 Product identifier
   - Trade name: METALURE L-55700
   - Product code: 056257IA0 056257IA0

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 of person responsible for the SDS: msds.eckart@altana.com

1.4 Emergency telephone number
   - GBK Gefahrgut Büro GmbH, Ingelheim, Germany:
     From outside US: (001) 352-323-3500
     (First call in English, response in your language is possible)
     US & Canada (toll free): 1-800-5355-053

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture
   Classification (REGULATION (EC) No 1272/2008)
   Flammable liquids, Category 3
   H226: Flammable liquid and vapour.

2.2 Label elements
   Labelling (REGULATION (EC) No 1272/2008)
   - Hazard pictograms:
   - Signal word: Warning
   - Hazard statements: H226 Flammable liquid and vapour.
Precautionary statements:

Prevention:
P210 Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
P233 Keep container tightly closed.

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

2.3 Other hazards
This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS-No.</th>
<th>EC-No.</th>
<th>Index-No.</th>
<th>Classification REGULATION (EC) No 1272/2008</th>
<th>Concentration (% w/w)</th>
</tr>
</thead>
<tbody>
<tr>
<td>aluminium powder (stabilised)</td>
<td>7429-90-5</td>
<td>231-072-3</td>
<td>013-002-00-1</td>
<td>Flam. Sol. 1; H228</td>
<td>&gt;= 10 - &lt; 20</td>
</tr>
<tr>
<td></td>
<td>201-2119529243-45</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>acetone</td>
<td>67-64-1</td>
<td>200-662-2</td>
<td>606-001-00-8</td>
<td>Flam. Liq. 2; H225 Eye Irrit. 2; H319 STOT SE 3; H336</td>
<td>&gt;= 1 - &lt; 10</td>
</tr>
</tbody>
</table>

Substances with a workplace exposure limit:

| 2-methoxy-1-methylethyl acetate | 108-65-6 | 203-603-9 | 607-195-00-7 | Flam. Liq. 3; H226 | >= 50 - <= 100 |

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice:
Move the victim to fresh air.
Do not leave the victim unattended.
Move out of dangerous area.

If inhaled:

- 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 skin, rinse well with water.
- If on clothes, remove clothes.

In case of eye contact:

- Immediately flush eye(s) with plenty of water.
  - Flush eyes with water as a precaution.
  - 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

None known.

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

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.

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.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions:
- Evacuate personnel to safe areas.
- 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:
- 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.

6.3 Methods and material 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).
- Do not flush with water.

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.
- 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). Keep away from open flames, hot surfaces and sources of ignition.

Hygiene measures: 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 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.

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.

Further information on storage stability: 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

<table>
<thead>
<tr>
<th>Occupational Exposure Limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Components</td>
</tr>
<tr>
<td>2-methoxy-1-methylethyl acetate</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Further information</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>
Further information
Identifies the possibility of significant uptake through the skin, Indicative

<table>
<thead>
<tr>
<th>Substance</th>
<th>CAS-No.</th>
<th>Control parameters</th>
<th>Sampling time</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>aluminium powder (stabilised)</td>
<td>7429-90-5</td>
<td>Aluminium (Aluminium): 200 µg/l (Urine)</td>
<td>End of shift</td>
<td>SI BAT</td>
</tr>
<tr>
<td>acetone</td>
<td>67-64-1</td>
<td>Acetone: 20 mg/l (Urine)</td>
<td>End of shift</td>
<td>SI BAT</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Acetone: 38.95 Millimoles per mole Creatinine (Urine)</td>
<td>End of shift</td>
<td>SI BAT</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Acetone: 0.34 Millimoles per liter (Urine)</td>
<td>End of shift</td>
<td>SI BAT</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Acetone: 20 mg/g Creatinine (Urine)</td>
<td>End of shift</td>
<td>SI BAT</td>
</tr>
</tbody>
</table>

**Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:**

<table>
<thead>
<tr>
<th>Substance name</th>
<th>End Use</th>
<th>Exposure routes</th>
<th>Potential health effects</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-methoxy-1-methylethyl acetate</td>
<td>Workers</td>
<td>Skin contact</td>
<td>long term – systemic effects</td>
<td>796 mg/kg</td>
</tr>
</tbody>
</table>
Workers | Inhalation | long term – systemic effects | 275 mg/m³
--- | --- | --- | ---
Consumers | Ingestion | long term – systemic effects | 36 mg/kg
Consumers | Skin contact | long term – systemic effects | 320 mg/kg
Consumers | Inhalation | long term – systemic effects | 33 mg/m³
Consumers | Inhalation | long term – local effects | 33 mg/m³
aluminium powder (stabilised) | Workers | Inhalation | long term – local effects | 3.72 mg/m³
Consumers | Oral | long term – systemic effects | 3.95 mg/kg
acetone | Workers | Skin contact | long term – systemic effects | 186 mg/kg
Workers | Inhalation | long term – systemic effects | 1210 mg/m³
Consumers | Ingestion | long term – systemic effects | 62 mg/kg
Consumers | Skin contact | long term – systemic effects | 62 mg/kg
Consumers | Inhalation | long term – systemic effects | 200 mg/m³
Workers | Inhalation | short term – local effects | 2420 mg/m³

**Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:**

<table>
<thead>
<tr>
<th>Substance name</th>
<th>Environmental Compartment</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-methoxy-1-methylethyl acetate</td>
<td>Soil</td>
<td>0.29 mg/kg</td>
</tr>
<tr>
<td></td>
<td>Fresh water</td>
<td>0.635 mg/l</td>
</tr>
<tr>
<td></td>
<td>Fresh water sediment</td>
<td>3.29 mg/kg</td>
</tr>
<tr>
<td></td>
<td>Marine water</td>
<td>0.0635 mg/l</td>
</tr>
<tr>
<td></td>
<td>Marine sediment</td>
<td>0.329 mg/kg</td>
</tr>
<tr>
<td></td>
<td>STP</td>
<td>100 mg/l</td>
</tr>
<tr>
<td>aluminium powder (stabilised)</td>
<td>Fresh water</td>
<td>0.0749 mg/l</td>
</tr>
<tr>
<td></td>
<td>clarification plant</td>
<td>20 mg/l</td>
</tr>
<tr>
<td>acetone</td>
<td>Soil</td>
<td>29.5 mg/kg</td>
</tr>
<tr>
<td></td>
<td>Fresh water</td>
<td>10.6 mg/l</td>
</tr>
<tr>
<td></td>
<td>Fresh water sediment</td>
<td>30.4 mg/kg</td>
</tr>
<tr>
<td></td>
<td>Marine water</td>
<td>1.06 mg/l</td>
</tr>
<tr>
<td></td>
<td>Marine sediment</td>
<td>3.04 mg/kg</td>
</tr>
<tr>
<td></td>
<td>STP</td>
<td>100 mg/l</td>
</tr>
</tbody>
</table>

**8.2 Exposure controls**

**Personal protective equipment**

Eye protection : Goggles

Safety glasses
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.

Skin and body protection : Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Respiratory protection : Use suitable breathing protection if workplace concentration requires.

Environmental exposure controls
Water : The product should not be allowed to enter drains, water courses or the soil.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties
Appearance : liquid
Colour : silver
Odour : characteristic
Odour Threshold : No data available
pH : No data available
Freezing point : No data available
Boiling point/boiling range : 146 °C
Flash point : 46 °C
### Evaporation rate
- No data available

### Flammability (solid, gas)
- No data available

### Self-ignition
- No data available

### Auto-ignition temperature
- No data available

### Smoldering temperature
- No data available

### Decomposition temperature
- No data available

### Explosive properties
- No data available

### Oxidizing properties
- No data available

### Upper explosion limit / Upper flammability limit
- No data available

### Lower explosion limit / Lower flammability limit
- No data available

### Vapour pressure
- No data available

### Relative vapour density
- No data available

### Relative density
- No data available

### Density
- 0.9 g/cm³

### Bulk density
- No data available

### Water solubility
- No data available

### Solubility in other solvents
- No data available

### Partition coefficient: n-octanol/water
- No data available

### Decomposition temperature
- 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.
Stable under recommended storage conditions.
Vapours may form explosive mixture with air.

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
Contact with water or humid air: This information is not available.
Thermal decomposition: This information is not available.

SECTION 11: Toxicological information

11.1 Information on toxicological effects
Acute toxicity
Not classified based on available information.

Components:
aluminium powder (stabilised):
Acute inhalation toxicity: LC50 (Rat): > 5 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist

acetone:
Acute oral toxicity: LD50 (Rabbit): 4.700 - 5.800 mg/kg
METALURE L-55700

Acute inhalation toxicity: LC50 (Rat): 76 mg/l
   Exposure time: 4 h
   Test atmosphere: vapour

Acute dermal toxicity: LD50 (Rabbit): > 2.000 mg/kg

Skin corrosion/irritation
Not classified based on available information.

Components:

acetone:
Remarks: Repeated or prolonged contact with the mixture may cause removal of natural fat from the skin resulting in desiccation of the skin.

Serious eye damage/eye irritation
Not classified based on available information.

Components:

acetone:
Remarks: Severe eye irritation

Respiratory or skin sensitisation

Skin sensitisation
Not classified based on available information.

Respiratory sensitisation
Not classified based on available information.

Germ cell mutagenicity
Not classified based on available information.

Carcinogenicity
Not classified based on available information.

Reproductive toxicity
Not classified based on available information.

STOT - single exposure
Not classified based on available information.

STOT - repeated exposure
Not classified based on available information.

Aspiration toxicity
Not classified based on available information.
Further information

Product:
Remarks: Solvents may degrease the skin.

SECTION 12: Ecological information

12.1 Toxicity

Components:
acetone:
Toxicity to daphnia and other aquatic invertebrates: (Daphnia magna (Water flea)): 21.600 mg/l

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

Product:
Assessment: This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects

Product:
Additional ecological information: No data available

SECTION 13: Disposal considerations

European Waste Catalogue: 08 01 11 - waste paint and varnish containing organic solvents or other dangerous substances

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. In accordance with local and national regulations.
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. In accordance with local and national regulations.

SECTION 14: Transport information

14.1 UN number
ADR: UN 1263
IMDG: UN 1263
IATA: UN 1263

14.2 UN proper shipping name
ADR: PAINT
IMDG: PAINT
IATA: Paint

14.3 Transport hazard class(es)
ADR: 3
IMDG: 3
IATA: 3

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

IMDG
  Packing group: III
  Labels: 3
  EmS Code: F-E, S-E

IATA (Cargo)
  Packing instruction (cargo aircraft): 366
  Packing instruction (LQ): Y344
  Packing group: III
  Labels: Flammable Liquids

IATA (Passenger)
  Packing instruction (passenger aircraft): 355
14.5 Environmental hazards

ADR
Environmentally hazardous : no

IMDG
Marine pollutant : no

14.6 Special precautions for user
Not applicable

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code
Not applicable for product as supplied.

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).

15.2 Chemical safety assessment
This information is not available.

SECTION 16: Other information

Full text of H-Statements
H225 : Highly flammable liquid and vapour.
H226 : Flammable liquid and vapour.
H228 : Flammable solid.
H319 : Causes serious eye irritation.
H336 : May cause drowsiness or dizziness.

Full text of other abbreviations
Eye Irrit. : Eye irritation
Flam. Liq. : Flammable liquids
Flam. Sol. : Flammable solids
STOT SE : Specific target organ toxicity - single exposure
SI BAT : Slovenia. BAT-values
SI OEL : Slovenia. Chemical agents at work - Appendix 1: Occupational exposure limits
2000/39/EC / TWA : Limit Value - eight hours
2000/39/EC / STEL : Short term exposure limit
SI OEL / MV : Time Weighted Average

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECX - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ERx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

Further information

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.

SI / EN