

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

## LASERSAFE 040

Version 2.0

Revision Date 05.12.2019

Print Date 25.02.2022

---

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

#### 1.1 Product identifier

Trade name : LASERSAFE 040  
Material number : 052487L20

#### 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  
Guntersthal 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**

Not a hazardous substance or mixture.

**GHS-Labeling**

**LASERSAFE 040**

Version 2.0

Revision Date 05.12.2019

Print Date 25.02.2022

Not a hazardous substance or mixture.

**Hazardous components which must be listed on the label****SECTION 3: Composition/information on ingredients**

Substance name : Isafe 042

Substance No. :

**Hazardous components**

| Chemical name                 | CAS-No.<br>EINECS-No.  | Classification and<br>labelling | Concentration[%] |
|-------------------------------|------------------------|---------------------------------|------------------|
| aluminium powder (stabilised) | 7429-90-5<br>231-072-3 | Flam. Sol.;1;H228               | 30 - 60          |

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.

No hazards which require special first aid measures.

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.

In case of eye contact : Remove contact lenses.  
If eye irritation persists, consult a specialist.

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

**LASERSAFE 040**

Version 2.0

Revision Date 05.12.2019

Print Date 25.02.2022

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, Special powder against metal fire

Unsuitable extinguishing media : ABC powder, Carbon dioxide (CO<sub>2</sub>), Water, Foam

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

Specific hazards during firefighting : Contact with water liberates extremely flammable gas (hydrogen).

**5.3 Advice for firefighters**

Special protective equipment for firefighters : Wear self-contained breathing apparatus for firefighting if necessary.

Further information : Standard procedure for chemical fires. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**LASERSAFE 040**

Version 2.0

Revision Date 05.12.2019

Print Date 25.02.2022

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

Personal precautions : Use personal protective equipment.  
Evacuate personnel to safe areas.  
Avoid dust formation.

**6.2 Environmental precautions**

This information is not available.

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

Methods for cleaning up : Use mechanical handling equipment.  
  
Pick up and arrange disposal without creating dust.  
Sweep up and shovel.  
Do not flush with water.  
Keep in suitable, closed containers for disposal.

**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 creating dust. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces.  
Store away from heat.

For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area.

Advice on protection against fire and explosion : Provide appropriate exhaust ventilation at places where dust is formed.

**LASERSAFE 040**

Version 2.0

Revision Date 05.12.2019

Print Date 25.02.2022

Hygiene measures : General industrial hygiene practice.

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

Requirements for storage areas and containers : 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.

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 and strongly acid or alkaline materials.

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 powder (stabilised) | 7429-90-5 | AGW (Inhalable fraction)      | 10 mg/m <sup>3</sup> | 2014-04-02 | DE TRGS 900 |

**LASERSAFE 040**

Version 2.0

Revision Date 05.12.2019

Print Date 25.02.2022

|   |   |                          |            |            |             |
|---|---|--------------------------|------------|------------|-------------|
| Peak-limit: excursion factor (category) | 2;(II)  |                          |            |            |             |
| Further information                     | Commission for dangerous substancesSenate commission for the review of compounds at the work place dangerous for the health (MAK-commission). |                          |            |            |             |
| aluminium powder (stabilised)           | 7429-90-5   | AGW (Alveolate fraction) | 1,25 mg/m3 | 2014-04-02 | DE TRGS 900 |
| Peak-limit: excursion factor (category) | 2;(II)  |                          |            |            |             |
| Further information                     | Commission for dangerous substancesSenate commission for the review of compounds at the work place dangerous for the health (MAK-commission). |                          |            |            |             |

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

| Components                    | CAS-No.   | Value type (Form of exposure) | Control parameters                  | Update     | Basis |
|-------------------------------|-----------|-------------------------------|-------------------------------------|------------|-------|
| aluminium powder (stabilised) | 7429-90-5 | TWA (total dust)              | 50 Million particles per cubic foot | 2012-07-01 |       |
| aluminium powder (stabilised) | 7429-90-5 | TWA (Respirable)              | 5 mg/m3                             | 2013-10-08 |       |
| aluminium powder (stabilised) | 7429-90-5 | TWA (total dust)              | 15 mg/m3                            | 2012-07-01 |       |
| aluminium powder (stabilised) | 7429-90-5 | TWA (total)                   | 10 mg/m3                            | 2013-10-08 |       |
| aluminium powder (stabilised) | 7429-90-5 | TWA (respirable fraction)     | 5 mg/m3                             | 2012-07-01 |       |
| aluminium powder (stabilised) | 7429-90-5 | TWA (respirable fraction)     | 15 Million particles per cubic foot | 2012-07-01 |       |
| aluminium                     | 7429-90-5 | PEL (Total dust)              | 10 mg/m3                            | 2014-11-26 |       |

**LASERSAFE 040**

Version 2.0

Revision Date 05.12.2019

Print Date 25.02.2022

|                                     |           |                                   |                      |            |  |
|-------------------------------------|-----------|-----------------------------------|----------------------|------------|--|
| powder<br>(stabilised)              |           |                                   |                      |            |  |
| aluminium<br>powder<br>(stabilised) | 7429-90-5 | PEL (respirable<br>dust fraction) | 5 mg/m <sup>3</sup>  | 2014-11-26 |  |
| aluminium<br>powder<br>(stabilised) | 7429-90-5 | TWA<br>(Respirable<br>fraction)   | 1 mg/m <sup>3</sup>  | 2008-01-01 |  |
| aluminium<br>powder<br>(stabilised) | 7429-90-5 | TWA                               | 5 mg/m <sup>3</sup>  | 2005-09-01 |  |
| aluminium<br>powder<br>(stabilised) | 7429-90-5 | TWA (Total)                       | 15 mg/m <sup>3</sup> | 1989-01-19 |  |
| aluminium<br>powder<br>(stabilised) | 7429-90-5 | TWA<br>(Respirable<br>fraction)   | 5 mg/m <sup>3</sup>  | 1989-01-19 |  |
| aluminium<br>powder<br>(stabilised) | 7429-90-5 | TWA (total dust)                  | 15 mg/m <sup>3</sup> | 2011-07-01 |  |
| aluminium<br>powder<br>(stabilised) | 7429-90-5 | TWA (respirable<br>fraction)      | 5 mg/m <sup>3</sup>  | 2011-07-01 |  |
| aluminium<br>powder<br>(stabilised) | 7429-90-5 | TWA (Total<br>dust)               | 15 mg/m <sup>3</sup> | 1989-01-19 |  |
| aluminium<br>powder<br>(stabilised) | 7429-90-5 | TWA (respirable<br>dust fraction) | 5 mg/m <sup>3</sup>  | 1989-01-19 |  |
| aluminium<br>powder<br>(stabilised) | 7429-90-5 | TWA (welding<br>fumes)            | 5 mg/m <sup>3</sup>  | 2013-10-08 |  |
| aluminium<br>powder<br>(stabilised) | 7429-90-5 | TWA (pyro<br>powders)             | 5 mg/m <sup>3</sup>  | 2013-10-08 |  |
| aluminium<br>powder<br>(stabilised) | 7429-90-5 | TWA<br>(Respirable<br>fraction)   | 1 mg/m <sup>3</sup>  | 2013-03-01 |  |

**LASERSAFE 040**

Version 2.0

Revision Date 05.12.2019

Print Date 25.02.2022

|                               |           |                     |                     |            |  |
|-------------------------------|-----------|---------------------|---------------------|------------|--|
| aluminium powder (stabilised) | 7429-90-5 | TWA (Fumes)         | 5 mg/m <sup>3</sup> | 1989-01-19 |  |
| aluminium powder (stabilised) | 7429-90-5 | PEL (Welding fumes) | 5 mg/m <sup>3</sup> | 2017-10-02 |  |
| aluminium powder (stabilised) | 7429-90-5 | PEL (Pyro powders)  | 5 mg/m <sup>3</sup> | 2017-10-02 |  |

## 8.2 Exposure controls

### Personal protective equipment

Eye protection : Safety glasses

Hand protection

Material : Protective gloves

Remarks

: The suitability for a specific workplace should be discussed with the producers of the protective gloves.  
 The choice of an appropriate glove does not only depend on its material but also on other quality features and is different from one producer to the other.  
 The exact break through time can be obtained from the protective glove producer and this has to be observed.

Skin and body protection : Long sleeved clothing

Respiratory protection : Use suitable breathing protection if workplace concentration requires.  
 Breathing apparatus with filter.  
 P1 filter



**LASERSAFE 040**

Version 2.0

Revision Date 05.12.2019

Print Date 25.02.2022

: No personal respiratory protective equipment normally required.

**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                  | : granular                      |
| Colour                      | : No data available             |
| Odour                       | : characteristic                |
| pH                          | : No data available             |
| Melting point/range         | : 100 - 120 °C                  |
| Boiling point/boiling range | : Not applicable                |
| Flash point                 | :<br>Not applicable             |
| Bulk density                | : No data available             |
| Flammability (solid, gas)   | : The product is not flammable. |
| Auto-flammability           | : No data available             |
| Upper explosion limit       | : No data available             |
| Lower explosion limit       | : No data available             |
| Vapour pressure             | : No data available             |
| Density                     | : No data available             |
| Solubility(ies)             |                                 |

**LASERSAFE 040**

Version 2.0

Revision Date 05.12.2019

Print Date 25.02.2022

|  |                     |
|--|---------------------|
| 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.

Stable under recommended storage conditions.

Dust may form explosive mixture in air.

**10.4 Conditions to avoid**

Conditions to avoid : No data available

**LASERSAFE 040**

Version 2.0

Revision Date 05.12.2019

Print Date 25.02.2022

---

**10.5 Incompatible materials**

Materials to avoid : Acids  
Bases  
Oxidizing agents  
Water

**10.6 Hazardous decomposition products**

Hazardous decomposition products : No data available

Other information : No data available

---

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

No data available

**Skin corrosion/irritation**

No data available

**Serious eye damage/eye irritation**

No data available

**Respiratory or skin sensitisation**

No data available

**Carcinogenicity**

No data available

**LASERSAFE 040**

Version 2.0

Revision Date 05.12.2019

Print Date 25.02.2022

---

**Toxicity to reproduction/fertility**

No data available

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

No data available

**STOT - single exposure**

No data available

**STOT - repeated exposure**

No data available

**Aspiration toxicity**

No data available

**Further information****Product**

No data available

---

**SECTION 12: Ecological information****12.1 Toxicity**

No data available

**12.2 Persistence and degradability**

No data available

**LASERSAFE 040**

Version 2.0

Revision Date 05.12.2019

Print Date 25.02.2022

---

**12.3 Bioaccumulative potential**

No data available

**12.4 Mobility in soil**

No data available

**12.5 Results of PBT and vPvB assessment**

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 : In accordance with local and national regulations.

Contaminated packaging : Empty containers should be taken to an approved waste handling site for recycling or disposal.  
In accordance with local and national regulations.

**LASERSAFE 040**

Version 2.0

Revision Date 05.12.2019

Print Date 25.02.2022

---

**SECTION 14: Transport information****14.1 UN number****14.2 Proper shipping name****14.3 Transport hazard class****14.4 Packing group****14.5 Environmental hazards****14.6 Special precautions for user**

Not classified as dangerous in the meaning of transport regulations.

**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

**15.2 Chemical safety assessment**

No data available

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

**LASERSAFE 040**

Version 2.0

Revision Date 05.12.2019

Print Date 25.02.2022

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

H228 : Flammable solid.

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.