SAFETY DATA SHEET
LASERSAFE 040

SECTION 1. IDENTIFICATION

Product name: LASERSAFE 040
Product code: 052487L20

Manufacturer or supplier’s details
Company name of supplier: ECKART GmbH
Address: Guentersthal 4
Hartenstein 91235
Telephone: +499152770
Telefax: +499152777008

Emergency telephone number: CHEMTREC: 800-424-9300
CHEMTREC: 1-703-527-3387 (International)
GBK Gefahrgut Buero 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

GHS classification in accordance with 29 CFR 1910.1200
Not a hazardous substance or mixture.

GHS label elements
Not a hazardous substance or mixture.

Other hazards
None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous components

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS-No.</th>
<th>Concentration (% w/w)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aluminum</td>
<td>7429-90-5</td>
<td>&gt;= 30 - &lt; 50</td>
</tr>
</tbody>
</table>

SECTION 4. 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.

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.

Most important symptoms and effects, both acute and delayed : None known.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media : Dry sand 
Special powder against metal fire

Unsuitable extinguishing media : ABC powder 
Carbon dioxide (CO2) 
Water 
Foam

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

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

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

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and : Use personal protective equipment. 
Evacuate personnel to safe areas.
emergency procedures

Methods and materials for containment and cleaning up

Avoid dust formation.
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.

SECTION 7. HANDLING AND STORAGE

Advice on protection against fire and explosion

Provide appropriate exhaust ventilation at places where dust is formed.

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.

Conditions for safe storage

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.

Technical measures/Precautions

Protect from humidity and water.

Materials to avoid

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.

Further information on storage stability

No decomposition if stored and applied as directed.
## SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Value type (Form of exposure)</th>
<th>Control parameters / Permissible concentration</th>
<th>Basis</th>
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<tbody>
<tr>
<td>Aluminum</td>
<td>7429-90-5</td>
<td>TWA (total dust)</td>
<td>50 Million particles per cubic foot</td>
<td>OSHA Z-3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA (Respirable)</td>
<td>5 mg/m³</td>
<td>NIOSH REL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA (total dust)</td>
<td>15 mg/m³</td>
<td>OSHA Z-3</td>
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<td>TWA (total)</td>
<td>10 mg/m³</td>
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<td></td>
<td>TWA (respirable fraction)</td>
<td>5 mg/m³</td>
<td>OSHA Z-3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA (respirable fraction)</td>
<td>15 Million particles per cubic foot</td>
<td>OSHA Z-3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA (Respirable fraction)</td>
<td>1 mg/m³</td>
<td>ACGIH</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA</td>
<td>5 mg/m³ (Aluminium)</td>
<td>NIOSH REL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA (Total)</td>
<td>15 mg/m³ (Aluminium)</td>
<td>OSHA P0</td>
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<tr>
<td></td>
<td></td>
<td>TWA (Respirable fraction)</td>
<td>5 mg/m³ (Aluminium)</td>
<td>OSHA P0</td>
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<td></td>
<td>TWA (total dust)</td>
<td>15 mg/m³ (Aluminium)</td>
<td>OSHA Z-1</td>
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<td>TWA (respirable fraction)</td>
<td>5 mg/m³ (Aluminium)</td>
<td>OSHA Z-1</td>
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<td></td>
<td>TWA (Total)</td>
<td>15 mg/m³ (Aluminium)</td>
<td>OSHA P0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA (respirable dust fraction)</td>
<td>5 mg/m³ (Aluminium)</td>
<td>OSHA P0</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA (welding fumes)</td>
<td>5 mg/m³ (Aluminium)</td>
<td>NIOSH REL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>TWA (pyro)</td>
<td>5 mg/m³</td>
<td>NIOSH REL</td>
</tr>
</tbody>
</table>
SAFETY DATA SHEET
LASERSAFE 040

Version 1.0
Revision Date: 03/21/2018
SDS Number: 10200000637
Date of last issue: -
Date of first issue: 03/21/2018

<table>
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<th>powders)</th>
<th>(Aluminium)</th>
<th>ACGIH</th>
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<tr>
<td>TWA (Respirable fraction)</td>
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<td></td>
</tr>
<tr>
<td>TWA (Fumes)</td>
<td>5 mg/m3</td>
<td>OSHA P0</td>
</tr>
</tbody>
</table>

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

No personal respiratory protective equipment normally required.

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 breakthrough time can be obtained from the protective glove producer and this has to be observed.

Eye protection: Safety glasses
Skin and body protection: Long sleeved clothing
Hygiene measures: General industrial hygiene practice.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: granular
Colour: No data available
Odour: characteristic
Odour Threshold: No data available
pH: No data available
Melting point/range: 100 - 120 °C
Boiling point/boiling range: Not applicable
Flash point: Not applicable
Evaporation rate: No data available
**SAFETY DATA SHEET**

**LASERSAFE 040**

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<td>03/21/2018</td>
<td>102000000637</td>
<td></td>
<td>03/21/2018</td>
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</tbody>
</table>

Flammability (solid, gas) : The product is not flammable.

Upper explosion limit / Upper flammability limit : No data available

Lower explosion limit / Lower flammability limit : No data available

Vapour pressure : No data available

Relative density : No data available

Solubility(ies)

- Water solubility : insoluble

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

Auto-ignition temperature : No data available

Decomposition temperature : No data available

Viscosity : No data available

**SECTION 10. STABILITY AND REACTIVITY**

Reactivity : No decomposition if stored and applied as directed.

Chemical stability : No decomposition if stored and applied as directed.

Possibility of hazardous reactions : Contact with acids and alkalis may release hydrogen. Stable under recommended storage conditions. Dust may form explosive mixture in air.

Conditions to avoid : No data available

Incompatible materials : Acids
Bases
Oxidizing agents
Water

**SECTION 11. TOXICOLOGICAL INFORMATION**

**Acute toxicity**

Not classified based on available information.

**Skin corrosion/irritation**

Not classified based on available information.

**Serious eye damage/eye irritation**

Not classified based on available information.
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.

IARC
No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA
No component of this product present at levels greater than or equal to 0.1% is on OSHA’s list of regulated carcinogens.

NTP
No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

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

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity
No data available

Persistence and degradability
No data available
Bioaccumulative potential
No data available

Other adverse effects
No data available

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods
Waste from residues: 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.

SECTION 14. TRANSPORT INFORMATION

International Regulations
Remarks: Not classified as dangerous in the meaning of transport regulations.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Not applicable for product as supplied.

SECTION 15. REGULATORY INFORMATION

EPCRA - Emergency Planning and Community Right-to-Know Act

CERCLA Reportable Quantity
This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity
This material does not contain any components with a section 304 EHS RQ.

SARA 302 Extremely Hazardous Substances Threshold Planning Quantity
This material does not contain any components with a section 302 EHS TPQ.

SARA 311/312 Hazards: No SARA Hazards

SARA 313
The following components are subject to reporting levels established by SARA Title III, Section 313:

| Aluminum | 7429-90-5 | >= 30 - < 50 % |
Clean Air Act
This product neither contains, nor was manufactured with a Class I or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App.A + B).
This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).
This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).
This product does not contain any chemicals listed under the U.S. Clean Air Act Section 111 SOCM Intermediate or Final VOC's (40 CFR 60.489).

Clean Water Act
This product does not contain any Hazardous Substances listed under the U.S. Clean Water Act, Section 311, Table 116.4A.
This product does not contain any Hazardous Chemicals listed under the U.S. Clean Water Act, Section 311, Table 117.3.
This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

US State Regulations
Massachusetts Right To Know
Aluminum 7429-90-5

Pennsylvania Right To Know
1-Octene, polymer with ethene 26221-73-8
Aluminum 7429-90-5

California Prop. 65
WARNING: This product can expose you to chemicals including lead and cadmium, which is/are known to the State of California to cause cancer and birth defects or other reproductive harm. For more information go to www.P65Warnings.ca.gov.

California List of Hazardous Substances
Aluminum 7429-90-5

California Permissible Exposure Limits for Chemical Contaminants
Aluminum 7429-90-5

The components of this product are reported in the following inventories:
DSL    :   All components of this product are on the Canadian DSL
TSCA   :   On TSCA Inventory
TSCA list
No substances are subject to a Significant New Use Rule.

No substances are subject to TSCA 12(b) export notification requirements.

SECTION 16. OTHER INFORMATION

Full text of other abbreviations
ACGIH: USA. ACGIH Threshold Limit Values (TLV)
NIOSH REL: USA. NIOSH Recommended Exposure Limits
OSHA P0: USA. OSHA - TABLE Z-1 Limits for Air Contaminants - 1910.1000
OSHA Z-1: USA. Occupational Exposure Limits (OSHA) - Table Z-1 Limits for Air Contaminants
OSHA Z-3: USA. Occupational Exposure Limits (OSHA) - Table Z-3
AICS: Australian Inventory of Chemical Substances
ASTM: American Society for the Testing of Materials
bw: Body weight
CERCLA: Comprehensive Environmental Response, Compensation, and Liability Act
CMR: Carcinogen, Mutagen or Reproductive Toxicant
DIN: Standard of the German Institute for Standardisation
DOT: Department of Transportation
DIN: Standard of the German Institute for Standardisation
DSL: Domestic Substances List (Canada)
ECx: Concentration associated with x% response
EHS: Extremely Hazardous Substance
EmS: Emergency Schedule
ENCS: Existing and New Chemical Substances (Japan)
ErCx: Concentration associated with x% growth rate response
ERG: Emergency Response Guide
GHS: Globally Harmonized System
GLP: Good Laboratory Practice
HMSI: Hazardous Materials Identification System
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
MARPOL: International Convention for the Prevention of Pollution from Ships
MSHA: Mine Safety and Health Administration
n.o.s.: Not Otherwise Specified
NFPA: National Fire Protection Association
NO(A)EC: No Observed (Adverse) Effect Concentration
NO(A)EL: No Observed (Adverse) Effect Level
NOELR: No Observable Effect Loading Rate
NTP: National Toxicology Program
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; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RQ - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

Revision Date : 03/21/2018

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.

US / EN