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

1.1. Product identifier

GLS 993 H1

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

Use of the substance/mixture
Lubricating agent

1.3. Details of the supplier of the safety data sheet

Company name: Chemie-Technik GmbH
ELKALUB Hochleistungs-Schmierstoffe
Street: Robert-Bosch-Straße 19
Place: D-72189 Vöhringen
Telephone: +49(0)7454 9652-0
e-mail: info@elkalub.com
Contact person: Cornelia Hölle
Telephone: -25
e-mail: cornelia.hoelle@elkalub.com
Internet: www.elkalub.com

1.4. Emergency telephone number:

Emergency CONTACT (24-Hour-Number): GBK GmbH +49 (0)6132-84463

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008
This mixture is not classified as hazardous in accordance with Regulation (EC) No. 1272/2008.

2.2. Label elements

No information available.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

SECTION 4: First aid measures

4.1. Description of first aid measures

After inhalation
In case of inhalation of decomposition products, affected person should be moved into fresh air and kept still.

After contact with skin
Take off contaminated clothing and wash it before reuse.
After contact with skin, wash immediately with plenty of water and soap.

After contact with eyes
In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.

After ingestion
If accidentally swallowed rinse the mouth with plenty of water (only if the person is conscious) and obtain immediate medical attention.
4.2. Most important symptoms and effects, both acute and delayed
No information available.

4.3. Indication of any immediate medical attention and special treatment needed
Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media
- Co-ordinate fire-fighting measures to the fire surroundings.
- Extinguishing powder
- Carbon dioxide (CO2)
- Foam

Unsuitable extinguishing media
- Water spray jet
- Water

5.2. Special hazards arising from the substance or mixture
Section 10

5.3. Advice for firefighters
In case of fire: Wear self-contained breathing apparatus.

Additional information
- Suppress gases/vapours/mists with water spray jet. Collect contaminated fire extinguishing water separately.
- Do not allow entering drains or surface water.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
- Provide adequate ventilation. Do not breathe gas/fumes/vapour/spray. Avoid contact with skin, eyes and clothes. Use personal protection equipment.
- Remove all sources of ignition.

6.2. Environmental precautions
- Do not allow to enter into surface water or drains.

6.3. Methods and material for containment and cleaning up
- Clean contaminated articles and floor according to the environmental legislation.
- Treat the recovered material as prescribed in the section on waste disposal.

6.4. Reference to other sections
- Safe handling: see section 7
- Personal protection equipment: see section 8
- Disposal: see section 13
- Section 10: Stability and Reactivity

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling
- When using do not eat, drink or smoke.
- Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Advice on protection against fire and explosion
- Keep away from sources of ignition - No smoking.

Further information on handling
- After contact with skin, wash immediately with plenty of water and soap.
Advises on general occupational hygiene
Wash contaminated clothing prior to re-use.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels
Keep only in the original container in a cool, well-ventilated place.

Hints on joint storage
Combustible solids that cannot be assigned to any of the above storage classes

Further information on storage conditions
0 °C - 40 °C

7.3. Specific end use(s)
Lubricating agent

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits (EH40)

<table>
<thead>
<tr>
<th>CAS No</th>
<th>Substance</th>
<th>ppm</th>
<th>mg/m³</th>
<th>fibres/ml</th>
<th>Category</th>
<th>Origin</th>
</tr>
</thead>
<tbody>
<tr>
<td>122-39-4</td>
<td>Diphenylamine</td>
<td>-</td>
<td>10</td>
<td>-</td>
<td>TWA (8 h)</td>
<td>WEL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>-</td>
<td>20</td>
<td></td>
<td>STEL (15 min)</td>
<td>WEL</td>
</tr>
</tbody>
</table>

8.2. Exposure controls

Protective and hygiene measures
Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat, drink, smoke, sniff.

Eye/face protection
Suitable eye protection: goggles.

Hand protection
When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Skin protection
Use of protective clothing.

Respiratory protection
In case of inadequate ventilation wear respiratory protection.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: Paste
Colour: white
pH-Value: No data available
### Changes in the physical state

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Melting point</td>
<td>No data available</td>
</tr>
<tr>
<td>Boiling point or initial boiling point and boiling range:</td>
<td>No data available</td>
</tr>
<tr>
<td>Sublimation point</td>
<td>No data available</td>
</tr>
<tr>
<td>Softening point</td>
<td>No data available</td>
</tr>
<tr>
<td>Pour point</td>
<td>No data available</td>
</tr>
<tr>
<td>Flash point</td>
<td>No data available</td>
</tr>
<tr>
<td>Sustaining combustion</td>
<td>No data available</td>
</tr>
</tbody>
</table>

### Flammability

<table>
<thead>
<tr>
<th>State</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solid</td>
<td>No data available</td>
</tr>
<tr>
<td>Gas</td>
<td>No data available</td>
</tr>
</tbody>
</table>

### Explosive properties

The product is not: Explosive.

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Lower explosion limits</td>
<td>No data available</td>
</tr>
<tr>
<td>Upper explosion limits</td>
<td>No data available</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>No data available</td>
</tr>
</tbody>
</table>

### Self-ignition temperature

<table>
<thead>
<tr>
<th>State</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solid</td>
<td>No data available</td>
</tr>
<tr>
<td>Gas</td>
<td>No data available</td>
</tr>
</tbody>
</table>

### Decomposition temperature

<table>
<thead>
<tr>
<th>Value</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>No data available</td>
<td></td>
</tr>
</tbody>
</table>

### Oxidizing properties

Not oxidising.

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vapour pressure (at 20 °C)</td>
<td>&lt; 0,0001 hPa</td>
</tr>
<tr>
<td>Density (at 25 °C)</td>
<td>0,93 g/cm³</td>
</tr>
<tr>
<td>Bulk density</td>
<td>No data available</td>
</tr>
<tr>
<td>Water solubility</td>
<td>practically insoluble</td>
</tr>
</tbody>
</table>

### Solubility in other solvents

not determined

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Partition coefficient n-octanol/water</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity / dynamic</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity / kinematic</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative vapour density</td>
<td>not determined</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>not determined</td>
</tr>
</tbody>
</table>

### 9.2 Other information

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solid content</td>
<td>not determined</td>
</tr>
</tbody>
</table>

### SECTION 10: Stability and reactivity

#### 10.1 Reactivity

No hazardous reaction when handled and stored according to provisions.

#### 10.2 Chemical stability

The product is chemically stable under recommended conditions of storage, use and temperature.

#### 10.3 Possibility of hazardous reactions

not determined
The product is chemically stable under recommended conditions of storage, use and temperature.

10.4. Conditions to avoid
Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

10.5. Incompatible materials
Oxidizing agent

10.6. Hazardous decomposition products
Carbon monoxide, Carbon dioxide

SECTION 11: Toxicological information

11.1. Information on toxicological effects
Acute toxicity
Based on available data, the classification criteria are not met.

ATEmix tested

<table>
<thead>
<tr>
<th>Dose</th>
<th>Species</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50, oral &gt; 2000 mg/kg</td>
<td></td>
<td></td>
</tr>
<tr>
<td>LD50, dermal &gt; 2000 mg/kg</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Irritation and corrosivity
Based on available data, the classification criteria are not met.

Sensitising effects
Based on available data, the classification criteria are not met.

Carcinogenic/mutagenic/toxic effects for reproduction
Based on available data, the classification criteria are not met.

STOT-single exposure
Based on available data, the classification criteria are not met.

STOT-repeated exposure
Based on available data, the classification criteria are not met.

Aspiration hazard
Based on available data, the classification criteria are not met.

Additional information on tests
The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

SECTION 12: Ecological information

12.1. Toxicity
The product is not: Ecotoxic.

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
No data available

12.6. Other adverse effects
No information available.

Further information
Avoid release to the environment.
SECTION 13: Disposal considerations

13.1. Waste treatment methods

Disposal recommendations

Do not allow to enter into surface water or drains.
Dispose of waste according to "Kreislaufwirtschaftsgesetz (KrWG)".
Dispose of waste according to applicable legislation.
The waste key according to the European Waste Catalogue (EWC number) refers to the real wastes origin and therefore is not product- but use-oriented.
Consult the appropriate local waste disposal expert about waste disposal.

List of Wastes Code - residues/unused products

120112 WASTES FROM SHAPING AND PHYSICAL AND MEchanICAL SURFACE TREATMENT OF METALS AND PLASTICS; wastes from shaping and physical and mechanical surface treatment of metals and plastics; spent waxes and fats; hazardous waste

List of Wastes Code - used product

120112 WASTES FROM SHAPING AND PHYSICAL AND MECHANICAL SURFACE TREATMENT OF METALS AND PLASTICS; wastes from shaping and physical and mechanical surface treatment of metals and plastics; spent waxes and fats; hazardous waste

List of Wastes Code - contaminated packaging

150110 WASTE PACKAGING; ABSORBENTS, WIPING CLOTHS, FILTER MATERIALS AND PROTECTIVE CLOTHING NOT OTHERWISE SPECIFIED; packaging (including separately collected municipal packaging waste); packaging containing residues of or contaminated by hazardous substances; hazardous waste

Contaminated packaging
Wash with plenty of water. Completely emptied packages can be recycled.

SECTION 14: Transport information

Land transport (ADR/RID)

14.1. UN number:
No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name:
No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es):
No dangerous good in sense of this transport regulation.
14.4. Packing group:
No dangerous good in sense of this transport regulation.

Inland waterways transport (ADN)

14.1. UN number:
No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name:
No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es):
No dangerous good in sense of this transport regulation.
14.4. Packing group:
No dangerous good in sense of this transport regulation.

Marine transport (IMDG)

14.1. UN number:
No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name:
No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es):
No dangerous good in sense of this transport regulation.
14.4. Packing group:
No dangerous good in sense of this transport regulation.

Air transport (ICAO-TI/IATA-DGR)

14.1. UN number:
No dangerous good in sense of this transport regulation.
14.2. UN proper shipping name:
No dangerous good in sense of this transport regulation.
14.3. Transport hazard class(es):
No dangerous good in sense of this transport regulation.
14.4. Packing group:
No dangerous good in sense of this transport regulation.
14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

14.6. Special precautions for user

No dangerous good in sense of this transport regulation.
Section 7: Handling and Storage
Section 8: Exposure Controls/Personal Protection

14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

No information available.

SECTION 15: Regulatory information

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

EU regulatory information
Information according to 2012/18/EU (SEVESO III):
Not subject to 2012/18/EU (SEVESO III)

National regulatory information
Employment restrictions: Observe restrictions to employment for juveniles according to the 'juvenile work protection guideline' (94/33/EC).
Water hazard class (D): 1 - slightly hazardous to water

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Abbreviations and acronyms
CLP: Classification, labelling and Packaging
REACH: Registration, Evaluation and Authorization of Chemicals
GHS: Globally Harmonised System of Classification, Labelling and Packaging of Chemicals
UN: United Nations
CAS: Chemical Abstracts Service
DNEL: Derived No Effect Level
DMEL: Derived Minimal Effect Level
PNEC: Predicted No Effect Concentration
ATE: Acute toxicity estimate
LC50: Lethal concentration, 50%
LD50: Lethal dose, 50%
LL50: Lethal loading, 50%
EL50: Effect loading, 50%
EC50: Effective Concentration 50%
ErC50: Effective Concentration 50%, growth rate
NOEC: No Observed Effect Concentration
BCF: Bio-concentration factor
PBT: persistent, bioaccumulative, toxic
evPvB: very persistent, very bioaccumulative
ADR: Accord européen sur le transport des marchandises dangereuses par Route
(REuropean Agreement concerning the International Carriage of Dangerous Goods by Road)
RID: Regulations concerning the international carriage of dangerous goods by rail
ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
(Accord européen relatif au transport international des marchandises dangereuses par voies de navigation intérieures)
IMDG: International Maritime Code for Dangerous Goods
EmS: Emergency Schedules
Further Information

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor’s safety data sheet.)