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

1.1 Product identifier
- Trade name: 9302 UNIPAK 500 SILVER LITHO
- Material number: 014244RC0M1

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
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

GHS Classification
- Short-term (acute) aquatic hazard, Category 3, H402
- Long-term (chronic) aquatic hazard, Category 3, H412
GHS-Labelling

Hazard statements: H412: Harmful to aquatic life with long lasting effects.

Precautionary statements:
- Prevention: P273 Avoid release to the environment.
- Disposal: P501 Dispose of contents/container to an approved waste disposal plant.

Hazardous components which must be listed on the label

SECTION 3: Composition/information on ingredients

Substance name: unipak 450 pms877 litho 9277

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS-No.</th>
<th>Classification and labelling</th>
<th>Concentration [%]</th>
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</thead>
<tbody>
<tr>
<td>aluminium powder (stabilised)</td>
<td>7429-90-5 231-072-3</td>
<td>Flam. Sol.;1;H228</td>
<td>20 - 25</td>
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<tr>
<td>Distillates (petroleum), solvent-refined middle; Gasoil - unspecified</td>
<td>64741-91-9 265-093-4</td>
<td>Asp. Tox.;1;H304</td>
<td>10 - 20</td>
</tr>
<tr>
<td>Distillates (petroleum), solvent-refined middle; Gasoil - unspecified</td>
<td>64741-91-9 265-093-4</td>
<td>Asp. Tox.;1;H304</td>
<td>1 - 10</td>
</tr>
<tr>
<td>Tung oil</td>
<td>8001-20-5 232-272-3</td>
<td>Acute Tox.;5;H303</td>
<td>1 - 10</td>
</tr>
<tr>
<td>1-isopropyl-2,2-dimethyltrimethylene</td>
<td>6846-50-0 229-934-9</td>
<td>Repr.;2;H361d Aquatic</td>
<td>1 - 2,5</td>
</tr>
</tbody>
</table>
### 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.
- 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**
- Immediately flush eye(s) with plenty of water.
  - 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.

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

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.

SECTION 6: Accidental release measures

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

6.2 Environmental precautions

Environmental precautions: Prevent product from entering drains. If the product contaminates rivers and lakes or drains inform respective authorities.

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). Wipe up with absorbent material (e.g. cloth, fleece). 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: For personal protection see section 8. Smoking, eating and drinking should be prohibited in the application area.

Advice on protection against fire and explosion: Normal measures for preventive fire protection.

Hygiene measures: General industrial hygiene practice.

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. Containers which are opened must be carefully resealed and kept upright to prevent leakage. 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:

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Value type (Form of exposure)</th>
<th>Control parameters</th>
<th>Update</th>
<th>Basis</th>
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<td>aluminium powder (stabilised)</td>
<td>7429-90-5</td>
<td>AGW (Inhalable fraction)</td>
<td>10 mg/m3</td>
<td>2014-04-02</td>
<td>DE TRGS 900</td>
</tr>
<tr>
<td>Peak-limit: excursion factor (category)</td>
<td>2;(II)</td>
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<td></td>
<td></td>
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<td>----------------------------------------</td>
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<tr>
<td>Further information</td>
<td>Commission for dangerous substances Senate commission for the review of compounds at the work place dangerous for the health (MAK-commission).</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
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<td>7429-90-5</td>
<td>AGW (Alveolate fraction)</td>
<td>1,25 mg/m³</td>
<td>2014-04-02</td>
<td>DE TRGS 900</td>
</tr>
<tr>
<td>Distillates (petroleum), solvent-</td>
<td>64741-91-9</td>
<td>AGW</td>
<td>600 mg/m³</td>
<td>2009-02-16</td>
<td>DE TRGS 900</td>
</tr>
<tr>
<td>refined middle; Gasoil - unspecified</td>
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<td></td>
<td></td>
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<td>Polyethylene</td>
<td>9002-88-4</td>
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<tr>
<td>Further information</td>
<td>General dust value. For this substance no specific occupational exposure limit value is established, since the AGS does not yet have information regarding unspecific action on the respiratory organs in excess of the normal values.Commission for dangerous substancesSenate commission for the review of compounds at the work place dangerous for the health (MAK-commission).</td>
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### 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 breakthrough times, and of special workplace conditions (mechanical strain, duration of contact).
- The exact breakthrough 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.
Respiratory protection : Use suitable breathing protection if workplace concentration requires.

: No personal respiratory protective equipment normally required.

Environmental exposure controls
General advice :

: Prevent product from entering drains.
If the product contaminates rivers and lakes or drains inform respective authorities.

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 : No data available
Odour : characteristic
pH : No data available
Freezing point : No data available
Boiling point/boiling range : 260 °C
Flash point : 101 °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
Density : No data available
Water solubility : No data available
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
Viscosity, dynamic : No data available
Viscosity, kinematic : > 21 mm²/s (40 °C)

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.

10.4 Conditions to avoid

Conditions to avoid: Do not allow evaporation to dryness.

No data available

10.5 Incompatible materials

Materials to avoid: Acids

Bases

Oxidizing agents

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

Components:

Distillates (petroleum), solvent-refined middle; Gasoil -unspecified:
Acute oral toxicity: LD50 Rat: > 5 000 mg/kg

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

Distillates (petroleum), solvent-refined middle; Gasoil - unspecified:
Acute oral toxicity: LD50 Rat: > 5 000 mg/kg

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

Tung oil:
Acute oral toxicity: LD50 Rat: > 2 000 mg/kg

amines, hydrogenated tallow alkyl:
Acute oral toxicity: LD50 Rat: > 2 000 - 5 000 mg/kg
Method: OECD Test Guideline 401

Skin corrosion/irritation
No data available

Serious eye damage/eye irritation
No data available

Respiratory or skin sensitisation
No data available

Carcinogenicity
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
Product:
Ecotoxicology Assessment

Long-term (chronic) aquatic: Harmful to aquatic life with long lasting effects.
Components:
1-isopropyl-2,2-dimethyltrimethylene diisobutyrate (6846-50-0):
Toxicity to daphnia and other aquatic invertebrates: (Daphnia (water flea)): 2.46 mg/l

Ecotoxicology Assessment
Long-term (chronic) aquatic hazard: Harmful to aquatic life with long lasting effects.
Amines, hydrogenated tallow alkyl (61788-45-2):
Ecotoxicology Assessment
Short-term (acute) aquatic hazard: Very toxic to aquatic life.
Long-term (chronic) aquatic hazard: Very toxic to aquatic life with long lasting effects.

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
Product:
Additional ecological: An environmental hazard cannot be excluded in the event of
SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product: The product should not be allowed to enter drains, water courses or the soil.
In accordance with local and national regulations.

Contaminated packaging: In accordance with local and national regulations.

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

Prohibition/Restriction

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

15.2 Chemical safety assessment

No data available

SECTION 16: Other information

Full text of H-Statements

H228: Flammable solid.
H303: May be harmful if swallowed.
H304: May be fatal if swallowed and enters airways.
H315: Causes skin irritation.
H318: Causes serious eye damage.
H361d: Suspected of damaging the unborn child.
H373: May cause damage to organs through prolonged or repeated exposure.
H400: Very toxic to aquatic life.
H402: Harmful to aquatic life.
H410: Very toxic to aquatic life with long lasting effects.
H412: Harmful to aquatic life with long lasting effects.
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.