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

1.1 Product identifier

Trade name: Rotovario UV 900 114 Silver

Material number: 053498G60

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)

Skin irritation, Category 2 H315: Causes skin irritation.

Serious eye damage, Category 1 H318: Causes serious eye damage.

Skin sensitisation, Category 1 H317: May cause an allergic skin reaction.

Classification (67/548/EEC, 1999/45/EC)

Irritant R36: Irritating to eyes.

Irritant R43: May cause sensitisation by skin contact.

Sensitising :
2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms:

- Signal word: Danger

Hazard statements:
- H315: Causes skin irritation.
- H317: May cause an allergic skin reaction.
- H318: Causes serious eye damage.

Precautionary statements:

Prevention:
P280: Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response:
P302 + P352: IF ON SKIN: Wash with plenty of soap and water.
P305 + P351 + P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310: Immediately call a POISON CENTER/doctor.

Disposal:
P501: Dispose of contents/ container to an approved waste disposal plant.

Hazardous components which must be listed on the label:
- 28961-43-5: Propylidynetrimethanol, ethoxylated, esters with acrylic acid
- 52408-84-1: Glycerol, propoxylated, esters with acrylic acid
- 5137-70-2: Dodecylphosphonic acid

2.3 Other hazards

No information available.

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>Registration number</th>
<th>Classification (67/548/EEC)</th>
<th>Classification (REGULATION (EC) No 1272/2008)</th>
<th>Concentration (% w/w)</th>
</tr>
</thead>
<tbody>
<tr>
<td>aluminium powder</td>
<td>7429-90-5</td>
<td>231-072-3</td>
<td>01-2119529243-45</td>
<td>F; R11</td>
<td>Flam. Sol. 1; H228</td>
<td>&gt;= 25 - &lt; 50</td>
</tr>
<tr>
<td>(stabilised)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Rotovario UV 900 114 Silver

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.
Consult a physician.
Show this safety data sheet to the doctor in attendance.

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 skin irritation persists, call a physician.
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.
Small amounts splashed into eyes can cause irreversible tissue damage and blindness.
In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
Remove contact lenses.
Keep eye wide open while rinsing.
If eye irritation persists, consult a specialist.

If swallowed: Keep respiratory tract clear.
Do NOT induce vomiting.
Do not give milk or alcoholic beverages.
Never give anything by mouth to an unconscious person.
If symptoms persist, call a physician.
Take victim immediately to hospital.

4.2 Most important symptoms and effects, both acute and delayed
Symptoms: No information available.
Risks: No information available.

4.3 Indication of any immediate medical attention and special treatment needed
Treatment: No information available.

SECTION 5: Firefighting measures

5.1 Extinguishing media
Suitable extinguishing media: Dry sand
ABC powder
Foam

Unsuitable extinguishing media: Water

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. Use personal protective equipment. Avoid dust formation.

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).
- 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 formation of respirable particles.
- Do not breathe vapours/dust.
- Avoid exposure - obtain special instructions before use.
- Avoid contact with skin and eyes.
- For personal protection see section 8.
- Smoking, eating and drinking should be prohibited in the application area.
- Dispose of rinse water in accordance with local and national regulations.
- Persons susceptible to skin sensitisation problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used.

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

Hygiene measures:
- When using do not eat or drink. When using do not smoke.
- 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.
- Keep container tightly closed in a dry and well-ventilated place. 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

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Value type (Form of exposure)</th>
<th>Control parameters</th>
<th>Basis (Version Date)</th>
</tr>
</thead>
<tbody>
<tr>
<td>aluminium powder (stabilised)</td>
<td>7429-90-5</td>
<td>NGV (Total)</td>
<td>5 mg/m³</td>
<td>SE AFS (2011-12-16)</td>
</tr>
<tr>
<td>Further information</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Inhalable dust refers to the dust fraction as defined in the Swedish Standard SS-EN 481, Workplace Atmospheres - Size fraction definitions for measurement of airborne particles, 1st ED., 1993., Section 2.3 and having sampling characteristics as specified in paragraph 5.1. Respirable dust refers to the dust fraction as defined in the Swedish Standard SS-EN 481, Workplace Atmospheres - Size fraction definitions for measurement of airborne particles, 1st ED., 1993., Section 2.11 and having sampling characteristics as specified in paragraph 5.3. Total dust refers to all the particles (aerosols) trapped in a filter in the sampling apparatus described in Methods, Sampling of total dust and respirable dust, method nr 1010, published by the National Board of Occupational Safety and Health, now Work Environment Authority. The filter diameter shall normally be 37 mm but can also be 25 mm. Despite its name, not the total amount of airborne particles is measured by this method.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>aluminium powder (stabilised)</td>
<td>7429-90-5</td>
<td>NGV (Respirable)</td>
<td>2 mg/m³</td>
<td>SE AFS (2011-12-16)</td>
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<tr>
<td>Further information</td>
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<td></td>
</tr>
<tr>
<td></td>
<td></td>
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</tr>
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<td>aluminium powder</td>
<td>7429-90-5</td>
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<td>5 mg/m³</td>
<td>SE AFS</td>
</tr>
</tbody>
</table>
Further information

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<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>Propylidynetrimethanol, ethoxylated, esters with acrylic acid (28961-43-5)</td>
<td>Workers</td>
<td>Skin contact</td>
<td>long term – systemic effects</td>
<td>0,8 mg/kg</td>
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<tr>
<td></td>
<td>Workers</td>
<td>Inhalation</td>
<td>long term – systemic effects</td>
<td>16,2 mg/m3</td>
</tr>
<tr>
<td></td>
<td>Consumers</td>
<td>Skin contact</td>
<td>long term – systemic effects</td>
<td>0,5 mg/kg</td>
</tr>
<tr>
<td></td>
<td>Consumers</td>
<td>Inhalation</td>
<td>long term – systemic effects</td>
<td>4,9 mg/m3</td>
</tr>
<tr>
<td></td>
<td>Consumers</td>
<td>Ingestion</td>
<td>long term – systemic effects</td>
<td>1,4 mg/kg</td>
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<tr>
<td>Glycerol, propoxylated, esters with acrylic acid (52408-84-1)</td>
<td>Workers</td>
<td>Skin contact</td>
<td>long term – systemic effects</td>
<td>1,92 mg/kg</td>
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<tr>
<td></td>
<td>Workers</td>
<td>Inhalation</td>
<td>long term – systemic</td>
<td>16,22 mg/m3</td>
</tr>
</tbody>
</table>
Rotovario UV 900 114 Silver

8.2 Exposure controls

Personal protective equipment

Eye protection : Goggles

Eye wash bottle with pure water
Wear face-shield and protective suit for abnormal processing problems.

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.

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**: > 100 °C

**Flash point**: > 100 °C

- **Evaporation rate**: 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
- **Relative vapour density**: No data available
- **Relative density**: No data available
- **Density**: No data available
- **Bulk density**: No data available
- **Water solubility**: insoluble
- **Solubility in other solvents**: No data available
- **Partition coefficient: n-octanol/water**: No data available
- **Ignition temperature**: No data available
- **Decomposition temperature**: No data available
- **Viscosity, dynamic**: No data available
- **Viscosity, kinematic**: No data available
- **Flow time**: No data available
- **Explosive properties**: No data available
SAFETY DATA SHEET
according to Regulation (EC) No. 1907/2006

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Date of first issue: 18.11.2016

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
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

Components:
7429-90-5:
Acute inhalation toxicity: LC50 (Rat): > 5 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Skin corrosion/irritation

**Product:**
Remarks: Extremely corrosive and destructive to tissue.

**Components:**
28961-43-5:
Remarks: May cause skin irritation and/or dermatitis.

Serious eye damage/eye irritation

**Product:**
Remarks: May cause irreversible eye damage.

**Components:**
28961-43-5:
Remarks: May cause irreversible eye damage.

Respiratory or skin sensitisation

**Product:**
Remarks: Causes sensitisation.

**Components:**
28961-43-5:
Remarks: Causes sensitisation.

Further information

**Product:**
Remarks: No data available

**Components:**
28961-43-5:
Remarks: No data available

SECTION 12: Ecological information

12.1 Toxicity
No data available

12.2 Persistence and degradability
No data available

12.3 Bioaccumulative potential
No data available
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12.4 Mobility in soil
No data available

12.5 Results of PBT and vPvB assessment
Not relevant

12.6 Other adverse effects

**Product:**
Additional ecological information : Remarks: No data available

**Components:**
28961-43-5:
Additional ecological information : Remarks: No data available

SECTION 13: Disposal considerations

**European Waste Catalogue** : 08 03 12 - waste ink containing 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.

- **Contaminated packaging** : Empty remaining contents.
  Dispose of as unused product.
  Do not re-use empty containers.

SECTION 14: Transport information

**14.1 UN number**

**14.2 UN proper shipping name**

**14.3 Transport hazard class(es)**

**14.4 Packing group**

**14.5 Environmental hazards**

**14.6 Special precautions for user**

Remarks : 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**

Not applicable for product as supplied.
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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).

: This product does not contain substances of very high concern (Regulation (EC) No 1907/2006 (REACH), Article 57).

15.2 Chemical safety assessment

This information is not available.

SECTION 16: Other information

Full text of R-Phrases

R11 : Highly flammable.
R34 : Causes burns.
R36 : Irritating to eyes.
R43 : May cause sensitisation by skin contact.

Full text of H-Statements

H228 : Flammable solid.
H314 : Causes severe skin burns and eye damage.
H317 : May cause an allergic skin reaction.
H318 : Causes serious eye damage.
H319 : Causes serious eye irritation.

Full text of other abbreviations

Eye Dam. : Serious eye damage
Eye Irrit. : Eye irritation
Flam. Sol. : Flammable solids
Skin Corr. : Skin corrosion
Skin Sens. : Skin sensitisation

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); ErCx - 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
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.

SE / EN