SAFETY DATA SHEET
JetFluid UV 31023 silver

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : JetFluid UV 31023 silver
Product code : 022780SB0

Manufacturer or supplier's details
Company name of supplier : ECKART GmbH
Address : Guentersthal 4
           Hartenstein 91235
Telephone : +499152770
Telefax : +499152777008
Emergency telephone : 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
Acute toxicity (Oral) : Category 5
Skin irritation : Category 2
Eye irritation : Category 2A
Skin sensitization : Category 1
Reproductive toxicity : Category 2
Long-term (chronic) aquatic hazard : Category 3

GHS label elements
Hazard pictograms:

Signal Word: Warning

Hazard Statements:
H303 May be harmful if swallowed.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H319 Causes serious eye irritation.
H361 Suspected of damaging fertility or the unborn child.
H412 Harmful to aquatic life with long lasting effects.

Precautionary Statements:

Prevention:
P201 Obtain special instructions before use.
P202 Do not handle until all safety precautions have been read and understood.
P261 Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray.
P264 Wash skin thoroughly after handling.
P272 Contaminated work clothing should not be allowed out of the workplace.
P273 Avoid release to the environment.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response:
P302 + P352 IF ON SKIN: Wash with plenty of 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.
P312 Call a POISON CENTER or doctor/ physician if you feel unwell.
P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention.
P362 + P364 Take off contaminated clothing and wash it before reuse.

Storage:
P405 Store locked up.

Disposal:
P501 Dispose of contents/ container to an approved waste disposal plant.
Hazardous ingredients which must be listed on the label:
2-Propenoic acid, 1,1'-[(1,6-hexanediyl) ester
2-Propenoic acid, 2-[2-(ethyloxy)ethoxy]ethyl ester
Methanone, (diphenylphosphinyl)(2,4,6-trimethylphenyl)-
Poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-[(1-oxo-2-propen-1-yl)oxy]-, ether with 2-
ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1)
2-Propenoic acid, 2-phenoxyethyl ester
Propanoic acid, 2-methyl, 1,1'-[2,2-dimethyl-1-(1-methylethyl)-1,3-propanediyl] ester
Poly[oxy(methyl-1,2-ethanediyl)], .alpha.,.alpha.'..alpha.'-1,2,3-propanetriyltris[.omega.-[(1-
oxo-2-propen-1-yl)oxy]-
1-Propanone, 2-hydroxy-2-methyl-1-phenyl-
Poly[oxy(methyl-1,2-ethanediyl)], .alpha.,.alpha.'-(2,2-dimethyl-1,3-propanediyl)bis[.omega.-
[(1-oxo-2-propen-1-yl)oxy]-
Other hazards
None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS-No.</th>
<th>Concentration (% w/w)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Propenoic acid, 1,1'-[(1,6-hexanediyl) ester</td>
<td>13048-33-4</td>
<td>&gt;= 30 -&lt; 50</td>
</tr>
<tr>
<td>2-Propenoic acid, 2-[2-(ethyloxy)ethoxy]ethyl ester</td>
<td>86273-46-3</td>
<td>&gt;= 10 -&lt; 20</td>
</tr>
<tr>
<td>Methanone, (diphenylphosphinyl)(2,4,6-trimethylphenyl)-</td>
<td>75980-60-8</td>
<td>&gt;= 10 -&lt; 20</td>
</tr>
</tbody>
</table>
| Poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-[(1-oxo-2-propen-1-yl)oxy]-, ether with 2-
ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1) | 28961-43-5 | >= 5 -< 10 |
| 2-Propenoic acid, 2-phenoxyethyl ester | 48145-04-6 | >= 1 -< 5 |
| Aluminum | 7429-90-5 | >= 1 -< 5 |
| Poly[oxy(methyl-1,2-ethanediyl)], .alpha.,.alpha.'..alpha.'-1,2,3-propanetriyltris[.omega.-[(1-oxo-2-propen-1-
yl)oxy]- | 52408-84-1 | >= 1 -< 5 |
| 1-Propanone, 2-hydroxy-2-methyl-1-phenyl-
Poly[oxy(methyl-1,2-
ethanediyl)], .alpha.,.alpha.'-(2,2-dimethyl-1,3-propanediyl)bis[.omega.-[(1-oxo-2-propen-1-
yl)oxy]- | 84170-74-1 | >= 1 -< 5 |
General advice: Move out of dangerous area. Show this material 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: 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. Remove contact lenses. Keep eye wide open while rinsing. 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. Take victim immediately to hospital.

Most important symptoms and effects, both acute and delayed: May be harmful if swallowed. Causes skin irritation. May cause an allergic skin reaction. Causes serious eye irritation. Suspected of damaging fertility or the unborn child.

SECTION 5. FIRE-FIGHTING MEASURES

Unsuitable extinguishing media: High volume water jet

Specific hazards during firefighting: Do not allow run-off from fire fighting to enter drains or water courses.

Specific extinguishing methods: 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.

Special protective equipment for fire-fighters: Wear self-contained breathing apparatus for firefighting if necessary.
SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:
- Use personal protective equipment.

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.

Methods and materials for containment and cleaning up:
- Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).
- Keep in suitable, closed containers for disposal.

SECTION 7. HANDLING AND STORAGE

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

Advice on safe handling:
- Do not breathe vapors/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 sensitization problems or asthma, allergies, chronic or recurrent respiratory disease should not be employed in any process in which this mixture is being used.

Hygiene measures:
- When using do not eat or drink.
- When using do not smoke.
- Wash hands before breaks and at the end of workday.

Conditions for safe storage:
- Keep container tightly closed in a dry and well-ventilated place.
- 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:
- No decomposition if stored and applied as directed.
SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients 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>
</tr>
</thead>
<tbody>
<tr>
<td>Aluminum</td>
<td>7429-90-5</td>
<td>LMPE-PPT</td>
<td>10 mg/m³</td>
<td>MX OEL</td>
</tr>
<tr>
<td></td>
<td></td>
<td>LMPE-PPT (Dust)</td>
<td>10 mg/m³</td>
<td>MX OEL</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 (Respirable fraction)</td>
<td>1 mg/m³ (Aluminum)</td>
<td>ACGIH</td>
</tr>
</tbody>
</table>

Personal protective equipment

Respiratory protection: In the case of vapor formation use a respirator with an approved filter.

Hand protection

Remarks: The suitability for a specific workplace should be discussed with the producers of the protective gloves.

Eye protection: Wear face-shield and protective suit for abnormal processing problems.

Skin and body protection: Choose body protection according to the amount and concentration of the dangerous substance at the work place.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: liquid
Color: No data available
Odor: characteristic
Odor Threshold: No data available
pH: No data available
Melting point/freezing point: No data available
Boiling point/boiling range: > 100 °C
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Flash point : > 100 °C
Evaporation rate : No data available
Flammability (solid, gas) : No data available
Upper explosion limit / Upper flammability limit : No data available
Lower explosion limit / Lower flammability limit : No data available
Vapor pressure : No data available
Relative density : No data available
Solubility(ies) : No data available
Partition coefficient: n-octanol/water : No data available
Autoignition 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 : No decomposition if stored and applied as directed.
Conditions to avoid : No data available

SECTION 11. TOXICOLOGICAL INFORMATION
Acute toxicity
May be harmful if swallowed.
Components:
2-Propanoic acid, 1,1'-(1,6-hexanediyl) ester:
Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg
Method: OECD Test Guideline 401
Acute inhalation toxicity : (Rat): 0.14 mg/l
Exposure time: 7 h
Acute dermal toxicity : LD50 (Rabbit): 3,650 mg/kg
Method: OECD Test Guideline 402
Methanone, (diphenylphosphinyl)(2,4,6-trimethylphenyl)-:
Acute oral toxicity : LD50 (Rat): > 5,000 mg/kg

Skin corrosion/irritation
Causes skin irritation.

Components:
Poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-[(1-oxo-2-propen-1-yl)oxy]-, ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1):
Result: Skin irritation
Remarks: May cause skin irritation and/or dermatitis.

Poly[oxy(methyl-1,2-ethanediyl)], .alpha.,.alpha.,.alpha.'-1,2,3-propanetriyltris[.omega.-[(1-oxo-2-propen-1-yl)oxy]-:
Remarks: May cause skin irritation and/or dermatitis.

Serious eye damage/eye irritation
Causes serious eye irritation.

Components:
Poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-[(1-oxo-2-propen-1-yl)oxy]-, ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1):
Remarks: Vapors may cause irritation to the eyes, respiratory system and the skin.

Poly[oxy(methyl-1,2-ethanediyl)], .alpha.,.alpha.,.alpha.'-1,2,3-propanetriyltris[.omega.-[(1-oxo-2-propen-1-yl)oxy]-:
Remarks: Eye irritation

Respiratory or skin sensitization
Skin sensitization
May cause an allergic skin reaction.

Respiratory sensitization
Not classified based on available information.

Components:
Poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-[(1-oxo-2-propen-1-yl)oxy]-, ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1):
Result: May cause sensitization by skin contact.
Remarks: Causes sensitization. May cause sensitization of susceptible persons by skin contact.

**Poly[oxy(methyl-1,2-ethanediyl)], \(\alpha,\alpha',\alpha''\)-1,2,3-propanetriyltris[\(\omega:\left(1\text{-oxo-2-propen-1-yl}\right)\text{oxy}\)]-:**
Remarks: Causes sensitization. May cause sensitization of susceptible persons by skin contact.

**Germ cell mutagenicity**
Not classified based on available information.

**Carcinogenicity**
Not classified based on available information.

**Reproductive toxicity**
Suspected of damaging fertility or the unborn child.

**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**

**Components:**

**Poly(oxy-1,2-ethanediyl), \(\alpha,\alpha'-\text{hydro}-\omega:\left(1\text{-oxo-2-propen-1-yl}\right)\text{oxy}\), ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1):**
Remarks: No data available

**Poly[oxy(methyl-1,2-ethanediyl)], \(\alpha,\alpha',\alpha''\)-1,2,3-propanetriyltris[\(\omega:\left(1\text{-oxo-2-propen-1-yl}\right)\text{oxy}\)]-:**
Remarks: No data available

**SECTION 12. ECOLOGICAL INFORMATION**

**Ecotoxicity**

**Components:**

**Poly(oxy-1,2-ethanediyl), \(\alpha,\alpha'-\text{hydro}-\omega:\left(1\text{-oxo-2-propen-1-yl}\right)\text{oxy}\), ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1):**
Toxicity to daphnia and other aquatic invertebrates:  (Daphnia): 10,232.73 mg/l

Persistence and degradability
No data available

Bioaccumulative potential
No data available

Other adverse effects
No data available

Components:
Poly(oxy-1,2-ethanediyl), .alpha.-hydro-.omega.-(1-oxo-2-propen-1-yl)oxy,- ether with 2-ethyl-2-(hydroxymethyl)-1,3-propanediol (3:1):
Additional ecological information: No data available

Poly[methyl-1,2-ethanediyl]], .alpha.,.alpha.',.alpha.'-1,2,3-propanetriyltris.[.omega.-[(1-oxo-2-propen-1-yl)oxy]:
Additional ecological information: No data available

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods
Waste from residues: The product should not be allowed to enter drains, water courses or the soil.
Do not contaminate ponds, waterways or ditches with chemical or used container.
Send to a licensed waste management company.
In accordance with local and national regulations.

Contaminated packaging: Empty remaining contents.
Dispose of as unused product.
Do not re-use empty containers.
In accordance with local and national regulations.

SECTION 14. TRANSPORT INFORMATION

Domestic regulation

Special precautions for user
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Remarks : Not classified as dangerous in the meaning of transport regulations.

49 CFR : Not classified as dangerous in the meaning of transport regulations.

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

ADR : Not classified as dangerous in the meaning of transport regulations.

IATA-DGR : Not classified as dangerous in the meaning of transport regulations.

IMDG-Code : Not classified as dangerous in the meaning of transport regulations.

Not dangerous goods in the meaning of ADR/RID, ADN, IMDG-Code, ICAO/IATA-DGR

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

Safety, health and environmental regulations/legislation specific for the substance or mixture
Federal Law for the control of chemical precursors, essential chemical products and machinery for producing capsules, tablets and pills.

The ingredients of this product are reported in the following inventories:

DSL : This product contains one or several components that are not on the Canadian DSL nor NDSL.

TSCA : On TSCA Inventory

SECTION 16. OTHER INFORMATION

Full text of other abbreviations
ACGIH : USA. ACGIH Threshold Limit Values (TLV)
MX OEL : Mexico. Occupational Exposure Limits
Revision Date : 10/02/2018

The information provided in this Material 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.

MX / Z8