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

1.1 Product identifier
- Trade name: POTASSIUM ALUM
- Registration number: 01-2119960162-44

1.2 Relevant identified uses of the substance or mixture and uses advised against
- Use of the Substance/Mixture: Synthetic tanning agent, Starting product for pharmaceutical active principle, Flocculating agent Clothes, personal care products

1.3 Details of the supplier of the safety data sheet
- Company: OKER-CHEMIE GMBH
  Im Schleeke 77
  38642 Goslar
  Germany
- Telephone: +49 (0)53 21 - 7 51-34 15

1.4 Emergency telephone number
- E-mail address: infoSDS@hcstarck.com
- Responsible Department: Corporate HSEQ
- Emergency telephone: +49(0)551/19240

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture
- Classification (REGULATION (EC) No 1272/2008): No classification
- Classification (67/548/EEC, 1999/45/EC): No classification

2.2 Label elements
- Labelling (REGULATION (EC) No 1272/2008): No labelling required

2.3 Other hazards
- aluminium potassium bis(sulphate): This substance is not considered to be persistent, bioaccumulating nor toxic (PBT).

SECTION 3: Composition/information on ingredients

3.1 Substances
<table>
<thead>
<tr>
<th>Chemical Name</th>
<th>CAS-No.</th>
<th>Concentration [%]</th>
</tr>
</thead>
<tbody>
<tr>
<td>POTASSIUM ALUM</td>
<td>000010004845</td>
<td>1/10</td>
</tr>
</tbody>
</table>
SECTION 4: First aid measures

4.1 Description of first aid measures

If inhaled: Remove to fresh air. If symptoms persist, call a physician.

In case of skin contact: Wash off with soap and water. If skin irritation occurs, seek medical advice/attention.

In case of eye contact: Rinse with plenty of water. If eye irritation persists, consult a specialist.

If swallowed: Clean mouth with water and drink afterwards plenty of water. Obtain medical attention.

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: Extinguishing methods depends upon fire in vicinity poses., The product itself does not burn.

Unsuitable extinguishing media: None known.

5.2 Special hazards arising from the substance or mixture

Specific hazards during firefighting: sulfuric oxides (SOx)

5.3 Advice for firefighters

Special protective equipment for firefighters: In the event of fire, wear self-contained breathing apparatus.

Further information: None known.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures
Personal precautions : Use personal protective equipment. Avoid dust formation.

6.2 Environmental precautions
Environmental precautions : Do not flush into surface water or sanitary sewer system.

6.3 Methods and materials for containment and cleaning up
Methods for cleaning up : Use mechanical handling equipment. Avoid dust formation. Pick up and transfer to properly labelled containers.

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 dust formation. Provide sufficient air exchange and/or exhaust in work rooms. Avoid exceeding of the given occupational exposure limits (see section 8).
Advice on protection against fire and explosion : No special precautions required.
Hygiene measures : Handle in accordance with good industrial hygiene and safety practice. Keep working clothes separately.

7.2 Conditions for safe storage, including any incompatibilities
Requirements for storage areas and containers : Store in accordance with the particular national regulations.
Further information on storage conditions : Store in tightly closed containers in a dry place.

7.3 Specific end use(s)
Specific use(s) : no data available

SECTION 8: Exposure controls/personal protection

8.1 Control parameters
Contains no substances with occupational exposure limit values.

DNEL
aluminium potassium bis(sulphate) : 
End Use: Workers
Exposure routes: Inhalation
Potential health effects: Long-term systemic effects
Value: 13,05 mg/m³

PNEC aluminium potassium bis(sulphate) : 
Fresh water
Value: 0,112 mg/l

Marine water
Value: 0,112 mg/l

Water
Value: 1,1 mg/l

8.2 Exposure controls

**Personal protective equipment**

Eye protection : Safety glasses

Hand protection
Material : Butyl-rubber, Natural rubber, Nitrile rubber
Remarks : The data about break through time/strength of material is not valid for undissolved solids/dust.

Skin and body protection : Protective suit

Respiratory protection : Respiratory protective device with particle filter EN 143

**Environmental exposure controls**

General advice : Do not flush into surface water or sanitary sewer system.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance : crystalline

Colour : white

Odour : odourless

Odour Threshold : no data available

pH : 3 - 3,5, Concentration: 100,00 g/l at20 °C

Melting point/range : 90 °C

Boiling point/boiling range : no data available
Flash point : not applicable
Evaporation rate : not applicable
Lower explosion limit : no data available
Upper explosion limit : no data available
Vapour pressure : not applicable
Relative vapour density : Remarks: not applicable
Density : no data available
Bulk density : ca. 1.000 kg/m³
Water solubility : ca. 105 g/l at 20 °C
Auto-ignition temperature : no data available
Thermal decomposition : > 400 °C
Viscosity, dynamic : not applicable
Viscosity, kinematic : not applicable
Oxidizing properties : no data available

9.2 Other information
  Burning number : no data available
  Flammability (contact with water) : no data available

SECTION 10: Stability and reactivity

10.1 Reactivity
  No hazards to be specially mentioned.

10.2 Chemical stability
  Stable under normal conditions.

10.3 Possibility of hazardous reactions
  Hazardous reactions : None known.

10.4 Conditions to avoid
  Conditions to avoid : None known.

10.5 Incompatible materials
  Materials to avoid : None known.

10.6 Hazardous decomposition products
  Hazardous decomposition products :
### SECTION 11: Toxicological information

#### 11.1 Information on toxicological effects

**Components:** aluminium potassium bis(sulphate) :

<table>
<thead>
<tr>
<th>Effect</th>
<th>Route of Exposure</th>
<th>NOAEL or Effect</th>
<th>Method</th>
<th>GLP</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute inhalation toxicity</td>
<td>NOAEL mouse, male and female: 13.05 mg/l</td>
<td>GLP: No information available.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Remarks: (Calculation from oral NOAEL-600d mouse)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Acute dermal toxicity</td>
<td>NOAEL mouse: &gt; 100.000 mg/kg</td>
<td>Method: EPA OPP 81-2</td>
<td>GLP: No information available.</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Skin corrosion/irritation**

<table>
<thead>
<tr>
<th>Species</th>
<th>Result</th>
<th>Method</th>
<th>Test substance</th>
</tr>
</thead>
<tbody>
<tr>
<td>rabbit</td>
<td>No skin irritation</td>
<td>EPA OPP 81-5</td>
<td>Al₂(SO₄)₃ (CAS-No. 10043-01-3)</td>
</tr>
</tbody>
</table>

**Serious eye damage/eye irritation**

<table>
<thead>
<tr>
<th>Species</th>
<th>Result</th>
<th>Method</th>
<th>Test substance</th>
</tr>
</thead>
<tbody>
<tr>
<td>rabbit</td>
<td>No eye irritation</td>
<td>OECD Test Guideline 405</td>
<td>AlNH₄(SO₄)₂ (CAS No. 7784-25-0)</td>
</tr>
</tbody>
</table>

**Respiratory or skin sensitisation**

<table>
<thead>
<tr>
<th>Species</th>
<th>Result</th>
<th>Method</th>
<th>Test substance</th>
</tr>
</thead>
<tbody>
<tr>
<td>mouse</td>
<td>Does not cause skin sensitisation.</td>
<td>EPA OPP 81-6</td>
<td>Al₂(SO₄)₃ (CAS-No. 10043-01-3)</td>
</tr>
</tbody>
</table>

**Result:** Does not cause respiratory sensitisation.

**Germ cell mutagenicity**

<table>
<thead>
<tr>
<th>Type</th>
<th>Result</th>
<th>Method</th>
<th>Test species</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chromosome aberration test in vitro</td>
<td>negative</td>
<td>OECD Test Guideline 473</td>
<td></td>
</tr>
</tbody>
</table>

**Genotoxicity in vitro**

<table>
<thead>
<tr>
<th>Type</th>
<th>Result</th>
<th>Method</th>
<th>Test species</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chromosome aberration test in vitro with and without metabolic activation</td>
<td>negative</td>
<td>OECD Test Guideline 473</td>
<td></td>
</tr>
</tbody>
</table>

**Genotoxicity in vivo**

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

**Carcinogenicity**

<table>
<thead>
<tr>
<th>Type</th>
<th>Result</th>
</tr>
</thead>
<tbody>
<tr>
<td>No data available</td>
<td></td>
</tr>
</tbody>
</table>
Reproductive toxicity: Species: rat  
Sex: male and female  
Application Route: Oral  
NOAEL: 31 mg/kg, Method: OECD Test Guideline 416  
GLP: No information available.

Teratogenicity: Species: rat  
Application Route: Oral  
Method: Prenatal Developmental Toxicity Study (EPA OPPTS 870.3700)

STOT - single exposure: Assessment: The substance or mixture is not classified as specific target organ toxicant, single exposure.

Repeated dose toxicity: NOAEL: rat, male and female: 8160 mg/kg  
Application Route: Oral  
NOAEC: rat, male and female: 6,2 mg/kg  
Application Route: Inhalation  

STOT - repeated exposure: Assessment: The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Further information: None known.

SECTION 12: Ecological information

12.1 Toxicity

Components:  
aluminium potassium bis(sulphate):  
Toxicity to fish: LC50 (Pimephales promelas (fathead minnow)): 110 mg/l  
Exposure time: 96 h  
Test Method: static test  
Method: No information available.  
GLP: No information available.  
Fresh water

Toxicity to daphnia and other aquatic invertebrates: EC50 (Daphnia magna (Water flea)): 206 mg/l  
Exposure time: 16 h  
Test Method: static test  
Method: No information available.  
GLP: No information available.  
Fresh water
Toxicity to algae: EC50 (Chlorella vulgaris (Fresh water algae)): 133.3 mg/l
Exposure time: 720 h
Test Method: static test
Method: No information available.
Growth rate

Toxicity to fish (Chronic toxicity): NOEC: 5.58 mg/l
Exposure time: 7 d
Species: Oncorhynchus mykiss (rainbow trout)
Test Method: flow-through test
Method: no data available
GLP: No information available.

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity): NOEC: 21.54 mg/l
Exposure time: 7 d
Species: Ceriodaphnia Dubia (water flea)
Test Method: static test
Method: EPA 600/4-85/014
GLP: No information available.

Fresh water

Toxicity to soil dwelling organisms: NOEC: 956 mg/kg
Species: Eisenia sp. (annelids)
Method: OECD Test Guideline 207
GLP: No information available.

Plant toxicity: EC50: 12.9 mg/kg
Species: Hordeum vulgare
Method: EPA OPP 122-1
GLP: No information available.

Toxicity to terrestrial organisms: no data available

12.2 Persistence and degradability
Components:
aluminium potassium bis(sulphate):
Biodegradability: The methods for determining biodegradability are not applicable to inorganic substances.

Stability in water: no data available

12.3 Bioaccumulative potential
Components:
aluminium potassium bis(sulphate):
Bioaccumulation: This substance is not considered to be persistent, bioaccumulating nor toxic (PBT).

Partition coefficient: n-octanol/water: not applicable

12.4 Mobility in soil
Components:
aluminium potassium bis(sulphate):
Mobility: no data available
12.5 Results of PBT and vPvB assessment

Components:
aluminium potassium bis(sulphate) :
Assessment : This substance is not considered to be persistent, bioaccumulating
nor toxic (PBT).

12.6 Other adverse effects

Components:
aluminium potassium bis(sulphate) :
Ozone-Depletion Potential : no data available
Additional ecological information : None known.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product : In accordance with local and national regulations.
This product cannot be classified with disposal identification key acc. to the EU disposal directives as a classification results from the intended utilisation purpose of the consumer

SECTION 14: Transport information

14.1 UN number
ADR Not dangerous goods
IMDG Not dangerous goods
IATA Not dangerous goods

14.2 Proper shipping name
ADR Not dangerous goods
IMDG Not dangerous goods
IATA Not dangerous goods

14.3 Transport hazard class
ADR Not dangerous goods
IMDG Not dangerous goods
IATA Not dangerous goods

14.4 Packing group
ADR Not dangerous goods
IMDG Not dangerous goods
IATA
Not dangerous goods

14.5 Environmental hazards
   ADR
   Not dangerous goods
   IMDG
   Not dangerous goods
   IATA
   Not dangerous goods

14.6 Special precautions for user
   For personal protection see section 8.

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
   Major Accident Hazard Legislation
   Is not subject to the Seveso II Directive.

15.2 Chemical Safety Assessment
   yes

SECTION 16: Other 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.