Anhydrous Sodium Sulfate
Safety Data Sheet

Date of issue: 21/04/2016

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

1.1. Product identifier

Product form: Substance
Substance name: Anhydrous Sodium Sulfate
EC No: 231-820-9
CAS No: 7757-82-6
Formula: Na₂SO₄

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

1.2.1. Relevant identified uses

Use of the substance/mixture: Raw material for household detergents, use in the Kraft process, in glass industry, in textile processing industries, for cooling applications, as an inert drying agent in the laboratories, in chemical industries....

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Manufacturer/Supplier:
LES SALINES DE TATAOUINE
11 Rue des Lilas
1062 TUNIS MAHRAJENE – TUNISIA
T +216 71 792 564 / +216 71 846 052 – F +216 71 787 283
head.office@alkimia.tn

Only Representative in Europe:
LTS-REACH-OR
43 rue Laroque
33560 Sainte-Eulalie - FRANCE
T +33 5 57 77 56 16 - F +33 5 57 77 56 20
contact@lts-reach-or.com

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]
Not classified

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]
Child-resistant fastening: No
Tactile warning: No

2.3. Other hazards

Adverse physicochemical, human health and environmental effects: To our knowledge, this product does not present any particular risk, provided it is handled in accordance with good occupational hygiene and safety practice.

Other hazards not contributing to the classification: None, to our knowledge. The product does not meet the PBT and vPvB classification criteria.

SECTION 3: Composition/information on ingredients

3.1. Substance

Substance type: Mono-constituent

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Sulfate, Anhydrous</td>
<td>(CAS No) 7757-82-6</td>
<td>100</td>
</tr>
<tr>
<td></td>
<td>(EC no) 231-820-9</td>
<td></td>
</tr>
</tbody>
</table>
### 3.2. Mixture

Not applicable

### SECTION 4: First aid measures

#### 4.1. Description of first aid measures

<table>
<thead>
<tr>
<th>First-aid measures general</th>
<th>First-aid measures after inhalation</th>
<th>First-aid measures after eye contact</th>
<th>First-aid measures after ingestion</th>
<th>Symptoms/injuries after inhalation</th>
<th>Symptoms/injuries after eye contact</th>
<th>Symptoms/injuries after ingestion</th>
<th>Chronic symptoms</th>
</tr>
</thead>
<tbody>
<tr>
<td>: If you feel unwell, seek medical advice.</td>
<td>: Remove the victim into fresh air. Respiratory problems: consult a doctor/medical service. First-aid measures after skin contact: Rinse with water. Soap may be used. Take victim to a doctor if irritation persists.</td>
<td>: Rinse with water. Do not apply neutralizing agents. Take victim to an ophthalmologist if irritation persists.</td>
<td>: Rinse mouth with water. Immediately after ingestion: give lots of water to drink. Consult a doctor/medical service if you feel unwell. Ingestion of large quantities: immediately to hospital.</td>
<td>: Slight irritation. Symptoms/injuries after skin contact: Unlikely to cause harmful effects.</td>
<td>: Slight irritation.</td>
<td>:Abdominal pain. Diarrhoea. Change in the haemogramme/blood composition.</td>
<td>: No effects known.</td>
</tr>
</tbody>
</table>

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

Treat symptomatically.

### SECTION 5: Firefighting measures

#### 5.1. Extinguishing media

<table>
<thead>
<tr>
<th>Suitable extinguishing media</th>
<th>Unsuitable extinguishing media</th>
</tr>
</thead>
<tbody>
<tr>
<td>: Adapt extinguishing media to the environment.</td>
<td>: No unsuitable extinguishing media known.</td>
</tr>
</tbody>
</table>

#### 5.2. Special hazards arising from the substance or mixture

<table>
<thead>
<tr>
<th>Fire hazard</th>
<th>Explosion hazard</th>
<th>Hazardous decomposition products in case of fire</th>
</tr>
</thead>
<tbody>
<tr>
<td>: Non combustible.</td>
<td>: Not applicable</td>
<td>: Toxic fumes may be released</td>
</tr>
</tbody>
</table>

#### 5.3. Advice for firefighters

<table>
<thead>
<tr>
<th>Precautionary measures fire</th>
<th>Firefighting instructions</th>
<th>Protection during firefighting</th>
</tr>
</thead>
</table>

### SECTION 6: Accidental release measures

#### 6.1. Personal precautions, protective equipment and emergency procedures

##### 6.1.1. For non-emergency personnel

<table>
<thead>
<tr>
<th>Protective equipment</th>
<th>Emergency procedures</th>
<th>Measures in case of dust production</th>
</tr>
</thead>
</table>

##### 6.1.2. For emergency responders

<table>
<thead>
<tr>
<th>Protective equipment</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: &quot;Exposure controls/personal protection&quot;.</td>
<td></td>
</tr>
</tbody>
</table>

#### 6.2. Environmental precautions

Prevent entry to sewers and public waters. Avoid release to the environment.

#### 6.3. Methods and material for containment and cleaning up

<table>
<thead>
<tr>
<th>For containment</th>
<th>Methods for cleaning up</th>
<th>Other information</th>
</tr>
</thead>
<tbody>
<tr>
<td>: Contain released substance, pump into suitable containers. Consult &quot;Material-handling&quot; to select material of containers. Plug the leak, cut off the supply. Knock down/dilute dust cloud with water spray. Hazardous reaction: measure explosive gas-air mixture. If reacting: dilute combustible/toxic gases/vapours. Take account of toxic/corrosive precipitation water.</td>
<td>: Stop dust cloud by humidifying. Scoop solid spill into closing containers. See &quot;Material-handling&quot; for suitable container materials. Wash down leftovers with plenty of water. Wash clothing and equipment after handling.</td>
<td>: Dispose of materials or solid residues at an authorized site.</td>
</tr>
</tbody>
</table>
6.4. Reference to other sections
For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling
Precautions for safe handling
: Comply with the legal requirements. Clean contaminated clothing. Thoroughly clean dry the installation before use. Avoid raising dust. Keep away from naked flames/heat. Observe normal hygiene standards. Keep container tightly closed. Carry operations in the open/under local exhaust/ventilation or with respiratory protection.

Hygiene measures
: Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures
: Does not require any specific or particular technical measures.

Storage conditions
: Keep container tightly closed. Protect from sunlight. Store locked up. Store in a well-ventilated place. Keep cool.

Incompatible materials
: Strong acids. Reactive metals (Al, K, Zn ...).

Storage temperature
: < 30 °C

Heat and ignition sources
: heat sources.

Prohibitions on mixed storage
: (strong) acids. (strong) bases. water/moisture.

Storage area
: Store in a dry area. Meet the legal requirements.

Packaging materials
: SUITABLE MATERIAL: paper. cardboard. plastics. MATERIAL TO AVOID: aluminium.

7.3. Specific end use(s)
No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters
DNEL
: 20 mg/m³ (Long-term effects, workers)
PNEC
: 11.09 mg/l (aqua, freshwater)

8.2. Exposure controls
Appropriate engineering controls
: Ensure good ventilation of the work station. Extraction to remove dust at its source.

Personal protective equipment

for protective clothing
: Wear suitable protective clothing, gloves and eye/face protection Hand
protection
: Impermeable protective gloves

Eye protection
: Safety glasses. In case of dust production: protective goggles

Skin and body protection
: Protective clothing

Respiratory protection
: Dust production: dust mask with filter type P1

Environmental exposure controls
: Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties
Physical state
: Solid
Appearance
Molecular mass
: 142.04 g/mol
Colour
: White.
Odour
: Odourless.
Odour threshold
: No data available
pH
: >5 (10 %)
Relative evaporation rate (butylacetate=1)
: No data available
Melting point
: 884 °C
Freezing point
: Not applicable
Boiling point
: Not applicable
Flash point
: Not applicable
Auto-ignition temperature
: Not applicable
Decomposition temperature
: > 884 °C
Flammability (solid, gas)
: Non flammable
Vapour pressure
: No data available
Relative vapour density at 20 °C
: No data available
Relative density
: 2.7
Density : 2680 kg/m³
Solubility : Soluble in water. Soluble in glycerol.
        Water: 44.45 g/100ml (20 °C)
Log Pow : -4.38 (Calculated: US EPA)
Viscosity, kinematic : Not applicable
Viscosity, dynamic : No data available
Explosive properties : No data available
Oxidising properties : No data available
Explosive limits : Not applicable

9.2. Other information
SADT : Not applicable
Other properties : Hygroscopic.

SECTION 10: Stability and reactivity
10.1. Reactivity

10.2. Chemical stability
Hygroscopic.

10.3. Possibility of hazardous reactions
No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid
None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials
No additional information available

10.6. Hazardous decomposition products
Thermal decomposition generates: Sulphur oxides.

SECTION 11: Toxicological information
11.1. Information on toxicological effects
Acute toxicity : Not classified (Based on available data, the classification criteria are not met)

Sodium Sulfate, Anhydrous (7757-82-6)
LD50 oral rat > 10000 mg/kg (Rat; OECD 423: Acute Oral Toxicity – Acute Toxic Class Method; Literature study; > 2000 mg/kg bodyweight; Rat; Experimental value)
LC50 inhalation rat (mg/l) > 2.4 mg/l/4h (Dust) (OECD 436 Method) (Published Data)
Skin corrosion/irritation : Not classified (Based on available data, the classification criteria are not met) pH: 8.0 (10 %)
Serious eye damage/irritation : Not classified (Based on available data, the classification criteria are not met)
pH: 8.0 (10 %)
Respiratory or skin sensitisation : Not classified (Lack of data)
Germ cell mutagenicity : Not classified (Lack of data)
Carcinogenicity : Not classified (Lack of data)
Reproductive toxicity : Not classified (Lack of data)
Specific target organ toxicity (single exposure) : Not classified (Lack of data)

Sodium Sulfate, Anhydrous (7757-82-6)
NOAEL (oral, rat) 160 mg/kg bodyweight (OECD 414 method)

Specific target organ toxicity (repeated exposure) : Not classified (Not applicable)
Aspiration hazard : Not classified (Not applicable)

SECTION 12: Ecological information
12.1. Toxicity
Ecology - general : Not classified as dangerous for the environment according to the criteria of Directive 67/548/EEC. Not classified as dangerous for the environment according to the criteria of Regulation (EC) No 1272/2008.

Sodium Sulfate, Anhydrous (7757-82-6)
LOEC (chronic) > 100 mg/l (7 days; Ceriodaphnia dubia)
12.2. Persistence and degradability

**Sodium Sulfate, Anhydrous (7757-82-6)**

Persistence and degradability  | No data available.
ThOD                     | Not applicable (inorganic)

12.3. Bioaccumulative potential

**Sodium Sulfate, Anhydrous (7757-82-6)**

| BCF other aquatic organisms 1 | 0.5 (BCF; Other) |
| Log Pow                    | -4.38 (Calculated; US EPA) |
| Bioaccumulative potential  | Low potential for bioaccumulation (BCF < 500). |

12.4. Mobility in soil

**Sodium Sulfate, Anhydrous (7757-82-6)**

Surface tension | 0.071 N/m (20 °C; 1.005 g/l)

12.5. Results of PBT and vPvB assessment

<table>
<thead>
<tr>
<th>Component</th>
<th>PBT: not yet assessed</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sodium Sulfate, Anhydrous (7757-82-6)</td>
<td>vPvB: not yet assessed</td>
</tr>
</tbody>
</table>

12.6. Other adverse effects

No additional information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations  | Remove waste in accordance with local and/or national regulations.
European List of Waste (LoW) code  | 16 05 09 - discarded chemicals other than those mentioned in 16 05 06, 16 05 07 or 16 05 08

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number

Not regulated for transport

14.2. UN proper shipping name

<table>
<thead>
<tr>
<th>Proper Shipping Name (ADR)</th>
<th>Not regulated for transport</th>
</tr>
</thead>
<tbody>
<tr>
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</tr>
<tr>
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</tr>
<tr>
<td>Proper Shipping Name (RID)</td>
<td>Not regulated for transport</td>
</tr>
</tbody>
</table>

14.3. Transport hazard class(es)

<table>
<thead>
<tr>
<th>Class</th>
<th>Transport hazard class(es)</th>
<th>Not applicable</th>
</tr>
</thead>
<tbody>
<tr>
<td>ADR</td>
<td></td>
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<td></td>
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<tr>
<td>RID</td>
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</tbody>
</table>

14.4. Packing group

<table>
<thead>
<tr>
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<tbody>
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<tr>
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</tbody>
</table>

14.5. Environmental hazards

<table>
<thead>
<tr>
<th>Hazard</th>
<th>Information</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dangerous for the environment</td>
<td>No</td>
</tr>
<tr>
<td>Marine pollutant</td>
<td>No</td>
</tr>
<tr>
<td>Other information</td>
<td>No supplementary information available</td>
</tr>
</tbody>
</table>
14.6. Special precautions for user

- Overland transport
  Transport regulations (ADR): Not subject

- Transport by sea
  Transport regulations (IMDG): Not subject

- Air transport
  Transport regulations (IATA): Not subject

- Inland waterway transport
  No data available

- Rail transport
  Transport regulations (RID): Not subject

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

SECTION 15: Regulatory information

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

15.1.1. EU-Regulations
  No REACH Annex XVII restrictions

15.1.2. National regulations
  No additional information available

15.2. Chemical safety assessment
  No additional information available

SECTION 16: Other information

Indication of changes:
This sheet was updated (refer to the date at the top of this page).

The SDS delivery remains the responsibility of the importer even if an only representative has been appointed, unless if the only representative also imports and provides the substance.

Information in this safety data sheet is based on data provided by the non European manufacturer and on our current knowledge of the substance and is intended to describe the product for the purposes of health, safety and environmental requirements only. It is the user’s responsibility to determine the accuracy or adequacy of such information. The adoption of the necessary safety measures for any intended use remains the responsibility of the user.