Material Safety Data Sheet
According to CE 1907/2006/CE Regulation, attachment I

Substance: Aerosol
Stand: 26.05.2016 Rev.-Nr. 03

1. IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier
Trade name: 10620 / leak detection spray / 9881420
Product form: Mixture
Product code: 700601
Chemical family: Aerosol

1.2 Relevant identified uses of the substance or mixture and uses advised against
Industrial/Professional use spec: Industrial
For professional use only
Use of the substance/mixture: Soap detector air and gas leaks.

1.3 Details of the supplier of the safety data sheet
REFCO Manufacturing Ltd. Industriestrasse 11 | 6285 Hitzkirch Switzerland
Tel: +41 41 919 72 82 | Fax: +41 41 919 72 83
Mail: info@refco.ch

1.4 Emergency telephone number
Schweizerisches Toxikologisches Informationszentrum Zurich
Telephone number in urgent matters: 145 or +41 44 251 51 51
Not urgent matters: +41 44 251 66 66

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture
Classification according to Regulation (EC) No. 1272/2008 [CLP]
Aerosol 3 H229
Full text of H-phrases: see section 16

2.2 Label elements
Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Signal word (CLP): Warning
Hazard statements (CLP): H229 – Pressurised container: May burst if heated
P102 – Keep out of reach of children
P210 – Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking
P251 – Pressurized container: Do not pierce or burn, even after use
P260 – Do not breathe spray
P410+P412 - Protect from sunlight. Do not expose to temperatures exceeding 50 °C/122 °F

Extra phrases:
Not to be used for any purpose other than the one the product was designed for
For professional use only

Child-resistant fastening:
No
Tactile warning:
No

2.3 Other hazards
No additional information available
3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances
Not applicable

3.2 Mixture

<table>
<thead>
<tr>
<th>Substance name</th>
<th>Value(s)</th>
<th>Product identifier</th>
<th>Classification according to Directive 67/548/EEC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protoxyde d’azote</td>
<td>&lt; 1-5 %</td>
<td>(CAS No) 10024-97-2 (EC no) 233-032-0</td>
<td>O; R8</td>
</tr>
<tr>
<td>Alkylbenzène sulfonate de sodium</td>
<td>&lt; 0,1-1 %</td>
<td>(CAS No) 90194-45-9 (EC no) 290-656-6</td>
<td>Xi; R22; Xi; R41; Xi; R38</td>
</tr>
<tr>
<td>Alkylethersulphate de sodium</td>
<td>&lt; 0,1-1 %</td>
<td>(CAS No) 68585-34-2 (EC no) Polymer (REACH-no) 01-2119488639-16</td>
<td>Xi; R41; Xi; R38</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Substance name</th>
<th>Value(s)</th>
<th>CAS nr.</th>
<th>Classification according to Regulation (EC) No. 1272/2008 [CLP]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Protoxyde d’azote</td>
<td>&lt; 1-5 %</td>
<td>(CAS No) 10024-97-2 (EC no) 233-032-0</td>
<td>Ox. Gas 1, H270 Liquefied gas, H280</td>
</tr>
<tr>
<td>Alkylbenzène sulfonate de sodium</td>
<td>&lt; 0,1-1 %</td>
<td>(CAS No) 90194-45-9 (EC no) 290-656-6</td>
<td>Acute Tox. 4 (Oral), H302 Skin Irrit. 2, H315 Eye Dam. 1, H318</td>
</tr>
<tr>
<td>Alkylethersulphate de sodium</td>
<td>&lt; 0,1-1 %</td>
<td>(CAS No) 68585-34-2 (EC no) Polymer (REACH-no) 01-2119488639-16</td>
<td>Skin Irrit. 2, H315 Eye Dam. 1, H318</td>
</tr>
</tbody>
</table>

Full text of R- and H-phrases: see section 16

4. FIRST AID MEASURES

4.1 Description of first aid measures

Inhalation
Allow victim to breathe fresh air. Allow the victim to rest. Obtain medical attention if breathing difficulty persists.

Skin contact
Wash with plenty of soap and water.

Eye contact
In case of eye contact, immediately rinse with clean water for 10-15 minutes. Obtain medical attention if pain, blinking or redness persists.

Ingestion
Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention. Allow the victim to rest.
Material Safety Data Sheet  
According to CE 1907/2006/CE Regulation, attachment I

Substance: Aerosol

Stand: 26.05.2016 Rev.-Nr. 03

4.2 Most important symptoms and effects, both acute and delayed

**Inhalation**
Not expected to present a significant inhalation hazard under anticipated conditions of normal use.

**Skin contact**
Contact during a long period may cause slight irritation.

**Eye contact**
Direct contact with the eyes is likely to be irritating.

**Ingestion**
Ingestion unlikely.

4.3 Indication of any immediate medical attention and special treatment needed

Advice to physicians: Treat symptomatically

5. FIREFIGHTING MEASURES

5.1 Extinguishing media


Unsuitable extinguishing media: Do not use a heavy water stream.

5.2 Special hazards arising from the substance or mixture

Fire hazard: Not flammable.

Reactivity in case of fire: Prevent fire-fighting water from entering environment.

5.3 Advice for fire-fighters

Precautionary measures fire: Do not enter fire area without proper protective equipment, including respiratory protection.

Firefighting instructions: Exercise caution when fighting any chemical fire. During a fire, projections ignited aerosol that burst under excessive pressure has to be controlled. To avoid overpressure, cool aerosols with water.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

General measures: Measures to take in the case of crushing or piercing aerosols, causing the leaking of products contained in aerosols. Remove ignition sources. Ventilate area. No smoking. Provide local exhaust or general room ventilation. Evacuate and limit access.

Emergency procedures: Do not touch spilled material. Evacuate area.

Protective equipment: Wear recommended personal protective equipment. Provide adequate ventilation. Remove all sources of ignition. Avoid contact with skin and eyes. Do not inhale vapour.

6.2 Environmental precautions

Notify authorities if liquid enters sewers or public waters. Prevent entry to sewers and public waters.

6.3 Methods and material for containment and cleaning up

6.4 Reference to other sections
See Heading 8. Exposure controls and personal protection.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling
Precautions for safe handling:
Good ventilation of the workplace required. Use only properly specified equipment which is suitable for this product, its supply pressure and temperature. Not to be used for any purpose other than the one the product was designed for. Do not breathe gas, fumes, vapour or spray. During the handling of a pallet, you have to take all precaution to avoid a start of an accident perforation of the aerosol by a fork-lift truck. During the load and unloading of the vehicle, you have to take all the precaution to avoid a fall a Aerosol. Do not spray the aerosol neither close nor towards a flame, a white-hot body, an electrical appliance in running, DO NOT SMOCKING. Container under pressure. Do not drill or burn even after use.

Hygiene measures:
Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2 Conditions for safe storage, including any incompatibilities
Technical measures:
Keep at temperature not exceeding 50 °C. Proper grounding procedures to avoid static electricity should be followed. Use grounded electrical/mechanical equipment.

Storage conditions:
Recommendations applicable to warehouses and reserves which are stored aerosols. It is recommended to de-normalize aerosols in stock. The "aerosol" or area must be set with a wire mesh of mesh max 5cm, forming a cage or using walls to avoid splashing the aerosols may ignite rest of the stock. Do not smoke.

7.3 Specific end use(s)
No data available.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters
Ingredients with limit values at the workplace (only Switzerland):

<table>
<thead>
<tr>
<th>Substance name</th>
<th>CAS Nr.</th>
<th>MAK</th>
<th>TWA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Distickstoffmonoxid</td>
<td>10024-97-2</td>
<td>182 mg/m3</td>
<td>364 mg/m3</td>
</tr>
<tr>
<td></td>
<td></td>
<td>100 ml/m3</td>
<td>200 ml/m3 (NIOSH)</td>
</tr>
</tbody>
</table>

8.2 Exposure controls

Hand protection:
None under normal conditions. In case of repeated or prolonged contact wear gloves.

Eye protection:
Eye protection should only be necessary where liquid could be splashed or sprayed.

Skin and body protection:
Skin protection appropriate to the conditions of use should be provided.

Respiratory protection:
No special respiratory protection equipment is recommended under normal conditions of use with adequate ventilation.

Other information:
Do not eat, drink or smoke during use. Provide local exhaust or general room ventilation.
### 9. PHYSICAL AND CHEMICAL PROPERTIES

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>Liquid</td>
</tr>
<tr>
<td>Colour</td>
<td>Colourless</td>
</tr>
<tr>
<td>Odour</td>
<td>Characteristic</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>-</td>
</tr>
<tr>
<td>pH</td>
<td>-</td>
</tr>
<tr>
<td>Melting point /freezing point</td>
<td>-</td>
</tr>
<tr>
<td>Initial boiling point and boiling range</td>
<td>-</td>
</tr>
<tr>
<td>Flash point</td>
<td>-</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>-</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>-</td>
</tr>
<tr>
<td>Upper/lower flammability or explosive limits</td>
<td>-</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>-</td>
</tr>
<tr>
<td>Vapour density at 20°C</td>
<td>-</td>
</tr>
<tr>
<td>Density</td>
<td>1 (PA)</td>
</tr>
<tr>
<td>Solubility in water</td>
<td>Soluble</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water (log POW)</td>
<td>-</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>-</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>-</td>
</tr>
<tr>
<td>Viscosity</td>
<td>-</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>-</td>
</tr>
<tr>
<td>Oxidising properties</td>
<td>-</td>
</tr>
<tr>
<td>VOC content</td>
<td>0% (0 g/l)</td>
</tr>
</tbody>
</table>

### 10. STABILITY AND REACTIVITY

#### 10.1 Reactivity
Non flammable. Pressurised container: May burst if heated.

#### 10.2 Chemical stability
The product is stable at normal handling and storage conditions. Heating may cause an explosion.

#### 10.3 Possibility of hazardous reactions
None under normal conditions.

#### 10.4 Conditions to avoid

#### 10.5 Incompatible materials
Aerosol cases in metal, do not bring into contact with oxidize, acids or basis.

#### 10.6 Hazardous decomposition products
No additional information available

### 11. TOXICOLOGICAL INFORMATION

#### 11.1 Information on toxicological effects

<table>
<thead>
<tr>
<th>Effect</th>
<th>Classification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acute toxicity</td>
<td>Not classified</td>
</tr>
<tr>
<td>Skin corrosion/irritation</td>
<td>Not classified. Based on available data, the classification criteria are not met</td>
</tr>
<tr>
<td>Serious eye damage/irritation</td>
<td>Not classified</td>
</tr>
<tr>
<td>Respiratory or skin sensitisation</td>
<td>Not classified. Based on available data, the classification criteria are not met</td>
</tr>
</tbody>
</table>
Germ cell mutagenicity:  Not classified
Based on available data, the classification criteria are not met

Carcinogenicity:  Not classified
Based on available data, the classification criteria are not met

Reproductive toxicity:  Not classified
Based on available data, the classification criteria are not met

Specific target organ toxicity (single exposure):  Not classified
Based on available data, the classification criteria are not met

Specific target organ toxicity (repeated exposure):  Not classified
Based on available data, the classification criteria are not met

Aspiration hazard:  Not classified
Based on available data, the classification criteria are not met

Potential adverse human health effects and symptoms:
Direct contact with the exes is likely to be irritating. Contact during a long period may cause slight irritation.

12. ECOLOGICAL INFORMATION

12.1 Toxicity
No additional information available

12.2 Persistence and degradability
No additional information available

12.3 Bio accumulative potential
No additional information available

12.4 Mobility in soil
No additional information available

12.5 Results of PBT and vPvB assessment
No additional information available

12.6 Other adverse effects
Avoid release to the environment

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods
Waste disposal recommendations:
Dispose used or damaged aerosol cans at permitted disposal sites. Dispose in a safe manner in accordance with local/national regulations. Container under pressure. Do not drill or burn even after use.

Ecology - waste materials:
Avoid release to the environment.

14. TRANSPORT INFORMATION

14.1 UN-Number
In accordance with ADR / RID / IMDG / IATA / AND
UN-No.:  1950
Substance: Aerosol

Stand: 26.05.2016 Rev.-Nr. 03

### 14.2 UN proper shipping name:
<table>
<thead>
<tr>
<th>Proper Shipping Name (ADR):</th>
<th>AEROSOLS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proper Shipping Name (IMDG):</td>
<td>AEROSOLS</td>
</tr>
<tr>
<td>Proper Shipping Name (IATA):</td>
<td>AEROSOLS, NON-FLAMMABLE, CONTAINING TOXIC GAS</td>
</tr>
<tr>
<td>Proper Shipping Name (ADN):</td>
<td>AEROSOLS</td>
</tr>
<tr>
<td>Proper Shipping Name (RID):</td>
<td>AEROSOLS</td>
</tr>
</tbody>
</table>

### 14.3 Transport hazard class(es)

#### Hazard Label(s)

<table>
<thead>
<tr>
<th>Transport hazard class(es) (ADR):</th>
<th>2.2</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hazard labels (ADR):</td>
<td>2.2</td>
</tr>
<tr>
<td>Transport hazard class(es) (IMDG):</td>
<td>2.2</td>
</tr>
<tr>
<td>Danger labels (IMDG):</td>
<td>2.2</td>
</tr>
<tr>
<td>Transport hazard class(es) (IATA):</td>
<td>2.2</td>
</tr>
<tr>
<td>Hazard labels (IATA):</td>
<td>2.2</td>
</tr>
<tr>
<td>Transport hazard class(es) (ADN):</td>
<td>2.2</td>
</tr>
<tr>
<td>Danger labels (ADN):</td>
<td>2.2</td>
</tr>
<tr>
<td>Transport hazard class(es) (RID):</td>
<td>2.2</td>
</tr>
<tr>
<td>Danger labels (RID):</td>
<td>2.2</td>
</tr>
</tbody>
</table>

### 14.4 Packing Group

Not applicable

### 14.5 Environmental hazards

Dangerous for the environment: No
Marine pollutant: No
Other information: No supplementary information available

### 14.6 Special precautions for users

#### Overland transport:
- Classification code (ADR): 5A
- Special provisions (ADR): 190, 327, 344, 625
- Limited quantities (ADR): 1l
- Excepted quantities (ADR): E0
- Packing instructions (ADR): P207, LP02
- Special packing provisions (ADR): PP87, RR6, L2
- Mixed packing provisions (ADR): MP9
- Transport category (ADR): 3
- Special provisions for carriage - Packages (ADR): V14
- Special provisions for carriage - Loading, unloading and handling (ADR): CV9, CV12
- Tunnel restriction code (ADR): E

#### Transport by sea:
No data available

#### Air transport:
No data available
Material Safety Data Sheet
According to CE 1907/2006/CE Regulation, attachment I

Substance: Aerosol

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code
Not applicable

15. REGULATORY INFORMATION

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
Contains no REACH substances with Annex XVII restrictions
Contains no substance on the REACH candidate list
VOC content: 0 % (0 g/l)
Other information, restriction and prohibition regulations: Aerosol Generator Directive 75/324/EEC and its adaptations.

15.2 Chemical safety assessment
No chemical safety assessment has been carried out

16. OTHER INFORMATION

Data sources:

Other information:
Imp. DL4.

Full text of R-, H- and EUH-phrases:

<table>
<thead>
<tr>
<th>Acute Tox. 4 (Oral)</th>
<th>Acute toxicity (oral), Category 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aerosol 3</td>
<td>Aerosol, Category 3</td>
</tr>
<tr>
<td>Exe Dam. 1</td>
<td>Serious eye damage/eye irritation, Category 1</td>
</tr>
<tr>
<td>Liquefied gas</td>
<td>Gases under pressure : Liquefied gas</td>
</tr>
<tr>
<td>Ox. Gas 1</td>
<td>Oxidising Gases, Category 1</td>
</tr>
<tr>
<td>Skin Irrit. 2</td>
<td>Skin corrosion/irritation, Category 2</td>
</tr>
<tr>
<td>H229</td>
<td>Pressurised container: May burst if heated</td>
</tr>
<tr>
<td>H270</td>
<td>May cause or intensify fire; oxidizer</td>
</tr>
<tr>
<td>H280</td>
<td>Contains gas under pressure; may explode if heated</td>
</tr>
<tr>
<td>H302</td>
<td>Harmful if swallowed</td>
</tr>
<tr>
<td>H315</td>
<td>Causes skin irritation</td>
</tr>
<tr>
<td>H318</td>
<td>Causes serious eye damage</td>
</tr>
<tr>
<td>R22</td>
<td>Harmful if swallowed</td>
</tr>
<tr>
<td>R38</td>
<td>Irritating to skin</td>
</tr>
<tr>
<td>R41</td>
<td>Risk of serious damage to eyes</td>
</tr>
<tr>
<td>R8</td>
<td>Contact with combustible material may cause fire</td>
</tr>
<tr>
<td>O</td>
<td>Oxidising</td>
</tr>
<tr>
<td>Xi</td>
<td>Irritant</td>
</tr>
<tr>
<td>Xn</td>
<td>Harmful</td>
</tr>
</tbody>
</table>

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.

* Data compared to the previous version altered.
The asterisk (*) on the left side indicate the respective changes from the previous version.

End of the document