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

#### 1.1. Product identifier
- **Product form**: Mixture
- **Trade name**: TUBALL MATRIX 605

#### 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: Additive

##### 1.2.2. Uses advised against
- No additional information available

#### 1.3. Details of the supplier of the safety data sheet

<table>
<thead>
<tr>
<th>Region</th>
<th>Address</th>
<th>Phone</th>
<th>Email</th>
</tr>
</thead>
<tbody>
<tr>
<td>Europe: OCSiAl Europe S.a.r.l.</td>
<td>L-3364, Leudelange, 1, rue de la Poudrerie, Grand Duchy of Luxembourg</td>
<td>T +352 27 99 03 73 09.00-17.00 GMT+2 <a href="mailto:europe@ocsial.com">europe@ocsial.com</a></td>
<td>t+352 27 99 03 73 09.00-17.00 GMT+2 <a href="mailto:europe@ocsial.com">europe@ocsial.com</a></td>
</tr>
<tr>
<td>USA: OCSiAl LLC</td>
<td>500 S Front St., Suite 860, Columbus, OH 43215, USA</td>
<td>T +1 415 906 5271 09.00-17.00 GMT-4 <a href="mailto:usa@ocsial.com">usa@ocsial.com</a></td>
<td>t+1 415 906 5271 09.00-17.00 GMT-4 <a href="mailto:usa@ocsial.com">usa@ocsial.com</a></td>
</tr>
<tr>
<td>Asia: OCSiAl Asia Pacific Co., Ltd.</td>
<td>Office 208, Pilot Plant Bldg., Incheon Technopark 12 Gaetbeol-ro, Yeonsu-gu, Incheon, 406-840 Republic of Korea</td>
<td>T +82 32 260 0407 09.00-17.00 GMT+9 <a href="mailto:asiapacific@ocsial.com">asiapacific@ocsial.com</a></td>
<td>t+82 32 260 0407 09.00-17.00 GMT+9 <a href="mailto:asiapacific@ocsial.com">asiapacific@ocsial.com</a></td>
</tr>
<tr>
<td>China: OCSiAl Hong Kong Limited</td>
<td>No. 1102, 11/F, Lippo Sun Plaza, 28 Canton Road, Tsim Sha Tsui, Kowloon, Hong Kong</td>
<td>T +852 3575 3943 09.00-17.00; GMT+8 <a href="mailto:china@ocsial.com">china@ocsial.com</a></td>
<td>t+852 3575 3943 09.00-17.00; GMT+8 <a href="mailto:china@ocsial.com">china@ocsial.com</a></td>
</tr>
<tr>
<td>India: OCSiAl PRIVATE LIMITED</td>
<td>A504 Universal BusinessPark, Ansa Industrial Estate, Chandivali, Andheri (E) Mumbai 400072</td>
<td>T +91 22 4120 8615 09.00-17.00; GMT+5.5 <a href="mailto:india@ocsial.com">india@ocsial.com</a></td>
<td>t+91 22 4120 8615 09.00-17.00; GMT+5.5 <a href="mailto:india@ocsial.com">india@ocsial.com</a></td>
</tr>
</tbody>
</table>

##### 1.4. Emergency telephone number
- **EMEA**: +44 1865 407333 (English) (Carechem 24)
- **East/South East Asia**: +65 3158 1074 (English, Hindi, Japanese, Korean, Malay, Mandarin) (Carechem 24)

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture
- **Classification according to Regulation (EC) No. 1272/2008 [CLP]**
  - Not classified

- **Adverse physicochemical, human health and environmental effects**
  - No additional information available

#### 2.2. Label elements
- **Labelling according to Regulation (EC) No. 1272/2008 [CLP]**
  - Hazard pictograms (CLP): Not classified
  - Signal word (CLP): Not classified
  - Precautionary statements (CLP): Not classified

#### 2.3. Other hazards not contributing to the classification
- No additional information available

### SECTION 3: Composition/information on ingredients

#### 3.1. Substances
- Not applicable

#### 3.2. Mixtures

<table>
<thead>
<tr>
<th>Name</th>
<th>Product identifier</th>
<th>%</th>
<th>Classification according to Regulation (EC) No. 1272/2008 [CLP]</th>
</tr>
</thead>
<tbody>
<tr>
<td>Siloxanes and silicones</td>
<td>(CAS No.) trade secret</td>
<td>70</td>
<td>Not classified</td>
</tr>
<tr>
<td>Siloxanes and silicones, vinyl group-terminated</td>
<td>(CAS No.) trade secret</td>
<td>25</td>
<td>Not classified</td>
</tr>
<tr>
<td>Single wall carbon nanotubes*</td>
<td>(EC-No.) 943-098-9 (REACH-no) 01-2120130006-75</td>
<td>5</td>
<td>Eye Irrit. 2, H319</td>
</tr>
</tbody>
</table>

* Single wall carbon nanotubes TUBALL™ - Full text of H-statements: see section 16
**SECTION 4: First aid measures**

4.1. **Description of first aid measures**
- **First-aid measures after inhalation**: Remove victim to fresh air and keep at rest in a position comfortable for breathing.
- **First-aid measures after skin contact**: Wash with plenty of soap and water. Remove/Take off immediately all contaminated clothing. Wash contaminated clothing before reuse.
- **First-aid measures after eye contact**: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

4.2. **Most important symptoms and effects, both acute and delayed**
- **Symptoms/effects**: Excessive exposure may lead to burning sensation in the mouth and throat, salivation, nausea, abdominal pain, vomiting, and diarrhea.
- **Symptoms/effects after inhalation**: May cause irritation to the respiratory tract.
- **Symptoms/effects after skin contact**: May cause moderate irritation, including burning sensation, tearing, redness or swelling.

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

No additional information available

**SECTION 5: Firefighting measures**

5.1. **Extinguishing media**
- **Suitable extinguishing media**: Powder, alcohol-resistant foam, water spray, carbon dioxide.
- **Unsuitable extinguishing media**: None known.

5.2. **Special hazards arising from the substance or mixture**
- **Fire hazard**: None known.
- **Explosion hazard**: None known.
- **Hazardous decomposition products in case of fire**: Carbon dioxide. Carbon monoxide.

5.3. **Advice for firefighters**
- **Protective equipment for firefighters**: In case of fire: Wear self-contained breathing apparatus.
- **Emergency procedures**: Provide adequate ventilation. Evacuate area. Avoid inhalation of vapours.

**SECTION 6: Accidental release measures**

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

6.1.1. **For non-emergency personnel**
- **Protective equipment**: Wear suitable protective clothing.
- **Emergency procedures**: Ensure adequate ventilation. Evacuate area.

6.1.2. **For emergency responders**
- **Protective equipment**: Wear suitable protective clothing, gloves and eye/face protection. In case of fire: Wear self-contained breathing apparatus.
- **Emergency procedures**: Provide adequate ventilation. Evacuate area. Avoid inhalation of vapours.

6.2. **Environmental precautions**
- Do not allow to enter into surface water or drains. Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

6.3. **Methods and material for containment and cleaning up**
- **For containment**: Clean spills promptly. Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents). Ventilate affected area. Stop leak if safe to do so.
- **Methods for cleaning up**: Collect in closed containers for disposal. Absorb remaining liquid with sand or inert absorbent and remove to safe place. Clean spills promptly.

6.4. **Reference to other sections**
- No additional information available

**SECTION 7: Handling and storage**

7.1. **Precautions for safe handling**
- **Precautions for safe handling**: Avoid contact with skin, eyes and clothes. Carry out operations in the open/under local exhaust/ventilation or with respiratory protection. Avoid breathing dust/fume/gas/mist/vapours/spray. To prevent thermal burns avoid contact with hot product.
- **Hygiene measures**: Do not eat, drink or smoke when using this product. Wash contaminated clothing before reuse.

7.2. **Conditions for safe storage, including any incompatibilities**
- **Storage conditions**: Store in dry, cool, well-ventilated area. Keep container tightly closed. Protect from sunlight.
- **Maximum storage period**: 18 months
- **Heat and ignition sources**: Keep away from open flames, hot surfaces and sources of ignition.
- **Information on mixed storage**: Store away from Water (Including sewageplant).
Special rules on packaging: Keep container tightly closed.

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

SECTION 8: Exposure controls/personal protection

8.1. Control parameters
No additional information available

8.2. Exposure controls

Personal protective equipment:

Materials for protective clothing:
Wear suitable protective clothing. Wear chemical resistant protective clothing (EN 14605) and protective shoes (S1P or S3)

Hand protection:
Wear suitable gloves tested to EN 374. NBR (Nitrile rubber). Thickness of glove material: > 0.35 mm. Breakthrough time: > 60 minutes. Unsuitable material: neoprene

Eye protection:
Safety glasses with side shields. EN 166

Skin and body protection:
Safety glasses with face shield. DIN EN 14605

Respiratory protection:
Dust production: dust mask with filter type P3. Half-mask with filter according to EN 149.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Physical state</td>
<td>Liquid</td>
</tr>
<tr>
<td>Appearance</td>
<td>Viscous.</td>
</tr>
<tr>
<td>Colour</td>
<td>Black.</td>
</tr>
<tr>
<td>Odour</td>
<td>Characteristic.</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>No data available</td>
</tr>
<tr>
<td>pH</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative evaporation rate (butylacetate=1)</td>
<td>No data available</td>
</tr>
<tr>
<td>Melting point</td>
<td>No data available</td>
</tr>
<tr>
<td>Freezing point</td>
<td>No data available</td>
</tr>
<tr>
<td>Boiling point</td>
<td>No data available</td>
</tr>
<tr>
<td>Flash point</td>
<td>&gt; 280 °C</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>No data available</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>300 °C</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No data available</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative vapour density at 20 °C</td>
<td>No data available</td>
</tr>
<tr>
<td>Relative density</td>
<td>No data available</td>
</tr>
<tr>
<td>Solubility</td>
<td>No data available</td>
</tr>
<tr>
<td>Log Pow</td>
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</tr>
<tr>
<td>Viscosity, kinematic</td>
<td>No data available</td>
</tr>
<tr>
<td>Viscosity, dynamic</td>
<td>No data available</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>Not explosive.</td>
</tr>
<tr>
<td>Oxidising properties</td>
<td>Not oxidizing.</td>
</tr>
<tr>
<td>Explosive limits</td>
<td>No data available</td>
</tr>
</tbody>
</table>
SECTION 10: Stability and reactivity

10.1. Reactivity
Stable under normal conditions.

10.2. Chemical stability
Stable under normal conditions.

10.3. Possibility of hazardous reactions
None known.

10.4. Conditions to avoid
Keep away from open flames, hot surfaces and sources of ignition.

10.5. Incompatible materials
Strong oxidizing agents.

10.6. Hazardous decomposition products
Thermal combustion may release carbon monoxide and dioxide. Amorphous silica.

SECTION 11: Toxicological information

11.1. Information on toxicological effects
Acute toxicity (oral) : Not classified
Acute toxicity (dermal) : Not classified
Acute toxicity (inhalation) : Not classified

Siloxanes and silicones
| LD50 oral rat | > 5000 mg/kg |
| LD50 dermal rat | > 2000 mg/kg |

Skin corrosion/irritation : Not classified
Serious eye damage/irritation : Not classified
Respiratory or skin sensitization : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified
Reproductive toxicity : Not classified
STOT-single exposure : Not classified
STOT-repeated exposure : Not classified
Aspiration hazard : Not classified

SECTION 12: Ecological information

12.1. Toxicity
Acute aquatic toxicity : Not classified
Chronic aquatic toxicity : Not classified

12.2. Persistence and degradability
No additional information available

12.3. Bioaccumulative 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
No additional information available
SECTION 13: Disposal considerations

13.1. Waste treatment methods
- Regional legislation (waste) : Dispose of this material and its container to hazardous or special waste collection point.
- Waste treatment methods : Disposal through controlled incineration or authorized waste dump.
- Sewage disposal recommendations : Prevent entry to sewers and public waters.

SECTION 14: Transport information

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

<table>
<thead>
<tr>
<th>ADR</th>
<th>IMDG</th>
<th>IATA</th>
<th>ADN</th>
<th>RID</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.1. UN number</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
<tr>
<td>14.2. UN proper shipping name</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
<tr>
<td>14.3. Transport hazard class(es)</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
<tr>
<td>14.4. Packing group</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
<tr>
<td>14.5. Environmental hazards</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

14.6. Special precautions for user
- Overland transport: Not applicable
- Transport by sea: Not applicable
- Air transport: Not applicable
- Inland waterway transport: Not applicable
- Rail transport: Not applicable

14.7. Transport in bulk according to Annex II of Marpol 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
- Contains no REACH substances with Annex XVII restrictions
- Contains no substance on the REACH candidate list
- Contains no REACH Annex XIV substances

15.1.2. National regulations

Germany
- VwVwS Annex reference: Water hazard class (WGK) 3, severe hazard to waters (Classification according to VwVwS, Annex 4)
- 12th Ordinance Implementing the Federal Immission Control Act - 12.BImSchV: Is not subject of the 12. BImSchV (Hazardous Incident Ordinance)

Netherlands
- SZW-lijst van kankerverwekkende stoffen: None of the components are listed
- SZW-lijst van mutagene stoffen: None of the components are listed
- NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding: None of the components are listed
- NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid: None of the components are listed
NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling: None of the components are listed

**Denmark**

Recommendations Danish Regulation: Young people below the age of 18 years are not allowed to use the product

### 15.2. Chemical safety assessment ►

For the following substances of this mixture a chemical safety assessment has been carried out

- Single wall carbon nanotubes

### SECTION 16: Other information

<table>
<thead>
<tr>
<th>Full text of H- and EUH-statements:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Eye Irrit. 2</td>
<td>Serious eye damage/eye irritation, Category 2</td>
</tr>
<tr>
<td>H319</td>
<td>Causes serious eye irritation</td>
</tr>
</tbody>
</table>

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

- Eye Irrit. 2
- H319

<table>
<thead>
<tr>
<th>Abbreviations and acronyms:</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>ADN</td>
<td>European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways</td>
</tr>
<tr>
<td>ADR</td>
<td>European Agreement concerning the International Carriage of Dangerous Goods by Road</td>
</tr>
<tr>
<td>CAS (Chemical Abstracts Service) number</td>
<td></td>
</tr>
<tr>
<td>CLP - Classification, Labelling and Packaging</td>
<td></td>
</tr>
<tr>
<td>CSR - Chemical Safety Report</td>
<td></td>
</tr>
<tr>
<td>IATA</td>
<td>International Air Transport Association</td>
</tr>
<tr>
<td>IMDG</td>
<td>International Maritime Dangerous Goods</td>
</tr>
<tr>
<td>PBT</td>
<td>Persistent Bioaccumulative Toxic</td>
</tr>
<tr>
<td>RID</td>
<td>Regulations concerning the International Carriage of Dangerous Goods by Rail</td>
</tr>
<tr>
<td>vPvB</td>
<td>Very Persistent and Very Bioaccumulative</td>
</tr>
</tbody>
</table>

**Revision**

All recent revision(s) are noted by a bold triangle pointed to right ‘►’.

**Other information**

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. It is the user’s responsibility to take mentioned precaution measures and ensure that this information is complete and sufficient for the use of this product.

**SDS EU (REACH Annex II)**

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.