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

1.1. Product identifier

- **Product form**: Mixture
- **Product name**: 4491 - INDUSTRIAL SYSTEM OIL CL 46
- **Product code**: 77-4491

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

1.2.1. Relevant identified uses

- **Industrial/Professional use spec**: Industrial
- **For professional use only**: Industrial

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Transnational Blenders B.V. (under license of 77 Lubricants)
Wieldrechtseweg 37
3316 BG Dordrecht - Netherlands
T +31 (0)78 652 7652
info@tnb.nl - www.tnb.nl

1.4. Emergency telephone number

- **Emergency number**: +31 (0)78 652 7652
- **Monday to Friday**: 09:00 - 16:00 (CET)

**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

No additional information available

**SECTION 3: Composition/information on ingredients**

3.1. Substance

Not applicable

3.2. Mixture

<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>Mineral oil</td>
<td></td>
<td>&gt;= 75</td>
<td>Asp. Tox. 1, H304</td>
</tr>
<tr>
<td>2,6-di-tert-butylphenol</td>
<td>(CAS No) 128-39-2</td>
<td>0,1 - 5</td>
<td>Skin Irrit. 2, H315, STOT SE 1, H370, Aquatic Chronic 1, H410</td>
</tr>
</tbody>
</table>

Full text of H-statements: see section 16

**SECTION 4: First aid measures**

4.1. Description of first aid measures

First-aid measures general: Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).
First-aid measures after inhalation: Allow breathing of fresh air. Allow the victim to rest.

First-aid measures after skin contact: Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse.

First-aid measures after eye contact: Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persist.

First-aid measures after ingestion: Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention.

4.2. Most important symptoms and effects, both acute and delayed
Symptoms/injuries: Not expected to present a significant hazard under anticipated conditions of normal use.

4.3. Indication of any immediate medical attention and special treatment needed
No additional information available

SECTION 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
No additional information available

5.3. Advice for firefighters
Firefighting instructions: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.
Protection during firefighting: Do not enter fire area without proper protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
6.1.1. For non-emergency personnel
Emergency procedures: Evacuate unnecessary personnel.

6.1.2. For emergency responders
Protective equipment: Equip cleanup crew with proper protection.
Emergency procedures: Ventilate area.

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

6.3. Methods and material for containment and cleaning up
Methods for cleaning up: Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

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

SECTION 7: Handling and storage

7.1. Precautions for safe handling
Precautions for safe handling: Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapour.

7.2. Conditions for safe storage, including any incompatibilities
Storage conditions: Keep only in the original container in a cool, well ventilated place away from: Keep container closed when not in use.
Incompatible products: Strong bases. Strong acids.
Incompatible materials: Sources of ignition. Direct sunlight.

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

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

<table>
<thead>
<tr>
<th></th>
<th>EU IOELV TWA (mg/m³)</th>
<th>EU IOELV STEL (mg/m³)</th>
<th>Belgium Limit value (mg/m³)</th>
<th>Belgium Short time value (mg/m³)</th>
<th>Bulgaria OEL TWA (mg/m³)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Mineral oil</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

26-8-2015 EN (English) SDS Ref.: 3451 2/7
8.2. Exposure controls

Personal protective equipment: Insulated gloves. Safety glasses. Protective clothing. Avoid all unnecessary exposure.

Hand protection: Wear protective gloves

Eye protection: Chemical goggles or safety glasses

Respiratory protection: Wear appropriate mask

Other information: Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: Liquid
Colour: Colourless.
Odour: characteristic.
Odour threshold: No data available
pH: No data available
Relative evaporation rate (butylacetate=1): No data available
Melting point: No data available
Freezing point: -15 °C
Boiling point: > 220 °C
Auto-ignition temperature: No data available
Decomposition temperature: No data available
Flammability (solid, gas): Non flammable.
Vapour pressure: No data available
Relative vapour density at 20 °C: No data available
Relative density  : No data available
Density          : 877,5 kg/m³
Solubility       : Insoluble in water.
Log Pow          : No data available
Viscosity, kinematic  : 46 mm²/s @40°C
Viscosity, dynamic : No data available
Explosive properties : No data available
Oxidising properties : No data available
Explosive limits   : No data available

9.2. Other information
No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity
No additional information available

10.2. Chemical stability
Not established.

10.3. Possibility of hazardous reactions
Not established.

10.4. Conditions to avoid
Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials
Strong acids. Strong bases.

10.6. Hazardous decomposition products

SECTION 11: Toxicological information

11.1. Information on toxicological effects
Acute toxicity    : Not classified

<table>
<thead>
<tr>
<th>Mineral oil</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 oral (rat)</td>
<td>&gt; 5000 mg/kg</td>
<td></td>
</tr>
<tr>
<td>LD50 dermal (rabbit)</td>
<td>&gt; 5000 mg/kg</td>
<td></td>
</tr>
<tr>
<td>LC50 inhalation (rat) (Vapours - mg/l/4h)</td>
<td>&gt; 5000 mg/l/4h</td>
<td></td>
</tr>
</tbody>
</table>

2,6-di-tert-butylphenol (128-39-2)

<p>| | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>LD50 oral (rat)</td>
<td>&gt; 5000 mg/kg</td>
<td></td>
</tr>
<tr>
<td>LD50 dermal (rabbit)</td>
<td>&gt; 10000 mg/kg</td>
<td></td>
</tr>
</tbody>
</table>

Skin corrosion/irritation : Not classified
Based on available data, the classification criteria are not met

Serious eye damage/irritation : Not classified
Based on available data, the classification criteria are not met

Respiratory or skin sensitisation : Not classified
Based on available data, the classification criteria are not met

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

<table>
<thead>
<tr>
<th>2,6-di-tert-butylphenol (128-39-2)</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>NOAEL (oral, rat)</td>
<td>100 mg/kg bodyweight</td>
</tr>
</tbody>
</table>

Specific target organ toxicity (repeated exposure) : Not classified
Based on available data, the classification criteria are not met
### 4491 - INDUSTRIAL SYSTEM OIL CL 46

#### Safety Data Sheet


**Aspiration hazard**: Not classified

Based on available data, the classification criteria are not met.

**Viscosity, kinematic**: 46 mm²/s @40°C

**Potential adverse human health effects and symptoms**: Based on available data, the classification criteria are not met.

---

### SECTION 12: Ecological information

#### 12.1. Toxicity

**Mineral oil**

<table>
<thead>
<tr>
<th>Endpoint</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>LC50 fish 1</td>
<td>16 mg/l</td>
</tr>
<tr>
<td>LC50 other aquatic organisms 1</td>
<td>0,1 mg/l</td>
</tr>
</tbody>
</table>

**2,6-di-tert-butylphenol (128-39-2)**

<table>
<thead>
<tr>
<th>Endpoint</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>LC50 fish 1</td>
<td>13 mg/l @96H</td>
</tr>
<tr>
<td>EC50 Daphnia 1</td>
<td>1,7 mg/l @48H</td>
</tr>
</tbody>
</table>

#### 12.2. Persistence and degradability

**Mineral oil**

Biodegradation: 31 % 28 Days OECD TG 301 B

**2,6-di-tert-butylphenol (128-39-2)**

Biodegradation: 24 % 28 Days

#### 12.3. Bioaccumulative potential

**Mineral oil**

Bioaccumulative potential: Not established.

**2,6-di-tert-butylphenol (128-39-2)**

Log Pow: 4,5

#### 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

Additional information: Avoid release to the environment

---

### SECTION 13: Disposal considerations

#### 13.1. Waste treatment methods

Waste disposal recommendations: Dispose in a safe manner in accordance with local/national regulations.

Ecology - waste materials: Avoid release to the environment.

---

### 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

**Proper Shipping Name (ADR)**: Not applicable

**Proper Shipping Name (IMDG)**: Not applicable

**Proper Shipping Name (IATA)**: Not applicable

**Proper Shipping Name (ADN)**: Not applicable

**Proper Shipping Name (RID)**: Not applicable

#### 14.3. Transport hazard class(es)

**ADR**

Transport hazard class(es) (ADR): Not applicable

**IMDG**

Transport hazard class(es) (IMDG): Not applicable
IATA
Transport hazard class(es) (IATA) : Not applicable

ADN
Transport hazard class(es) (ADN) : Not applicable

RID
Transport hazard class(es) (RID) : Not applicable

14.4. Packing group
Packing group (ADR) : Not applicable
Packing group (IMDG) : Not applicable
Packing group (IATA) : Not applicable
Packing group (ADN) : Not applicable
Packing group (RID) : 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 user
- Overland transport
No data available

- Transport by sea
No data available

- Air transport
No data available

- Inland waterway transport
No data available

- Rail transport
No data available

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
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) 1, low hazard to waters (Classification according to VwVwS, Annex 4)

Netherlands
Ministry's list of carcinogens : None of the components are listed
Ministry's list of mutagens : None of the components are listed
NON-exhaustive list of reproductive toxins - Breastfeeding : None of the components are listed
NON-exhaustive list of reproductive toxins - Fertility : None of the components are listed
NON-exhaustive list of reproductive toxins - Evolution

: None of the components are listed

**Denmark**

Classification remarks
: Emergency management guidelines for the storage of flammable liquids must be followed

Recommendations Danish Regulation
: Pregnant/breastfeeding women working with the product must not be in direct contact with the product

**15.2. Chemical safety assessment**

No chemical safety assessment has been carried out

**SECTION 16: Other information**

Data sources

Other information
: None.

Full text of H- and EUH-statements:

<table>
<thead>
<tr>
<th>H- and EUH-statements</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aquatic Chronic 1</td>
<td>Hazardous to the aquatic environment — Chronic Hazard, Category 1</td>
</tr>
<tr>
<td>Asp. Tox. 1</td>
<td>Aspiration hazard, Category 1</td>
</tr>
<tr>
<td>Skin Irrit. 2</td>
<td>Skin corrosion/irritation, Category 2</td>
</tr>
<tr>
<td>STOT SE 1</td>
<td>Specific target organ toxicity — single exposure, Category 1</td>
</tr>
<tr>
<td>H304</td>
<td>May be fatal if swallowed and enters airways</td>
</tr>
<tr>
<td>H315</td>
<td>Causes skin irritation</td>
</tr>
<tr>
<td>H370</td>
<td>Causes damage to organs</td>
</tr>
<tr>
<td>H410</td>
<td>Very toxic to aquatic life with long lasting effects</td>
</tr>
</tbody>
</table>

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