SAFETY DATA SHEET

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

1.1. Product identifier
   - Product name: SILICONE IMMERSION OIL 30CC
   - Product code: MXA22179 : 30CC

1.2. Relevant identified uses of the substance or mixture and uses advised against
   - Identified uses: Oil for microscope, oil-immersion objective lenses
   - Uses advised against: No information

1.3. Details of the supplier of the safety data sheet
   - Name of supplier (importer): Nikon Instruments Europe B.V.
     - Department in Charge: Marketing
     - Address: Tripolis 100, Burgerweeshuispad 101, 1076 ER Amsterdam, The Netherlands
     - Telephone number: +31-20-7099-000
     - Fax number: +31-20-7099-298
     - E-mail address: microscope.eu@nikon.com
   - Name of manufacturer in Japan: NIKON CORPORATION
     - Department in Charge: Healthcare Business Unit
     - Address: 471, Nagaodai-cho, Sakae-ku, Yokohama, Kanagawa 244-8533 Japan
     - Telephone number: +81-45-853-8608
     - Fax number: +81-45-853-8485
     - E-mail address: Msqa.Manager@nikon.com

1.4. Emergency telephone number
   - +81-45-853-8608

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture
   - Classification in accordance with EC No 1272/2008:
     - Not classified

2.2. Label elements
   - In accordance with EC No 1272/2008:
     - Pictogram: Not applicable
     - Signal word: Not applicable
     - Hazard Statements: Not applicable
     - Precautionary Statements: Not applicable
2.3. Other hazards
The product does not meet the criteria for PBT or vPvB according to Regulation (EC) No 1907/2006, Annex XIII.

SECTION 3: Composition/information on ingredients

3.1. Substances
Not applicable

3.2. Mixtures

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS No.</th>
<th>EC No.</th>
<th>Index No.</th>
<th>REACH Registration No.*</th>
<th>Concentration (wt %)</th>
<th>Classification**</th>
<th>Specific Concentration limits</th>
</tr>
</thead>
<tbody>
<tr>
<td>Silicone</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>100</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Modified polysiloxane</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

* Registration numbers of ingredients which shall be in compliance with Regulation (EC) No 1907/2006 will be filled in later.
** Full texts of relevant hazard statements and risk phrases can be seen in SECTION 16 of this SDS.

SECTION 4: First aid measures

4.1. Description of first aid measures

IF INHALED
Remove victim to fresh air. If you feel unwell, get medical advice/attention immediately and at rest. If symptoms continue, call a doctor/physician.

IF ON SKIN
Rinse with soap and water. If symptoms continue, call a doctor/physician.

IF IN EYES
Immediately rinse cautiously with water for 15 - 20 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If symptoms continue, call a doctor/physician.

IF SWALLOWED
Do not induce vomiting. Rinse mouth. Immediately get medical advice/attention.

4.2. Most important symptoms and effects, both acute and delayed
No information

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

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media:
Use water mist, dry chemical powder, fire foam or carbon dioxide.

Unsuitable extinguishing media
Applying direct water may be dangerous because fire may expand to surroundings.
5.2. Special hazards arising from the substance or mixture
   In case of fire, toxic decomposition products (e.g. carbon oxide, silicon oxide or formaldehyde) may be generated.

5.3. Advice for firefighters
   Cut off any ignition sources and extinguish with an appropriate agent.
   Cool the surrounding tank and the buildings with direct water jet to avoid risk of fire spreading.
   Take action from windward.
   Keep out except responsible personnel.
   Move container to a safe area if it can be done without risk.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures
   For non-emergency personnel:
      Wear suitable protective equipment (see SECTION 8) e.g., safety gloves, protective mask and/or protective glasses to prevent exposure.

   For emergency responders:
      Keep out except responsible personnel.
      Wear suitable protective equipment described in SECTION 8: Exposure controls/ personal protection.

6.2. Environmental precautions
   Avoid release into the environment because product may cause local effects.

6.3. Methods and material for containment and cleaning up
   Absorb with inert absorbent.
   Stop leak if you can do it without risk.
   In case of small amounts, wipe off spilled material with waste or wiping cloth and collect it in an adequate waste container.
   If case of large amounts, prevent leakage and enclose by embankment.
   Do not eat or drink near handling and storage locations.
   ELIMINATE all ignition sources (no smoking, flares, sparks or flames in immediate area).
   Prevent to flowing into drains, sewers, basements or closed areas.
   Do not drain the waste water.

6.4. Reference to other sections
   Refer to SECTION 8: Exposure controls/personal protection and SECTION 13: Disposal considerations as appropriate.

SECTION 7: Handling and storage

7.1. Precautions for safe handling
   Protective measures:
      Install appropriate equipment and wear suitable protective apparatus described in SECTION 8: Exposure controls/ personal protection.
      Handle the product in a well-ventilated area.
Keep away from heat/sparks/open flames/hot surfaces. No smoking. Ground/bond container and receiving equipment. Use explosion-proof electrical/ventilating/lighting equipment. Use only non-sparking tools. Take precautionary measures against static discharge. Do not eat, drink or smoke when using this product. Wash contaminated clothing before reuse.

Advice on general occupational hygiene:
Wash hands thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities
Technical measures:
Install appropriate equipment and wear suitable protective apparatus described in SECTION 8: Exposure controls/personal protection.

Incompatible materials:
Water, alcohol, acid, alkali, strong oxidizing agents, catalytic metal, metal compound

Conditions for safe storage:
Avoid sunlight. Store in a cool place. Avoid high-temperature materials.

Packing material:
Use a sealed container without damage or leakage.

7.3. Specific end use(s)
Oil for microscope, oil-immersion objective lenses.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters
Acceptable concentration (exposure limit, biological exposure index)

<table>
<thead>
<tr>
<th>EU IOELV</th>
<th>ACGIH TLV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not applicable</td>
<td>Not applicable</td>
</tr>
</tbody>
</table>

8.2. Exposure controls
Appropriate engineering controls:
Shower and eye washer should be available in the work area. Under high temperature or in case of mist generation, use ventilation.

Personal protective equipment:

<table>
<thead>
<tr>
<th>Protection</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>Respiratory protection</td>
<td>Wear appropriate protective mask or air aspirator as required.</td>
</tr>
<tr>
<td>Hand protection</td>
<td>If hand contact is possible, wear protective gloves.</td>
</tr>
<tr>
<td>Eye protection</td>
<td>Wear safety glasses or goggles if in eyes.</td>
</tr>
</tbody>
</table>
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>Appearance (physical state, form and colour)</td>
<td>Liquid</td>
</tr>
<tr>
<td>Odour</td>
<td>No information</td>
</tr>
<tr>
<td>Odour threshold</td>
<td>No information</td>
</tr>
<tr>
<td>pH</td>
<td>No information</td>
</tr>
<tr>
<td>Melting point/freezing point</td>
<td>No information</td>
</tr>
<tr>
<td>Initial boiling point and boiling range</td>
<td>No information</td>
</tr>
<tr>
<td>Flash point</td>
<td>No information</td>
</tr>
<tr>
<td>Evaporation rate</td>
<td>No information</td>
</tr>
<tr>
<td>Flammability (solid, gas)</td>
<td>No information</td>
</tr>
<tr>
<td>Upper/lower flammability or explosive limits</td>
<td>No information</td>
</tr>
<tr>
<td>Vapour pressure</td>
<td>No information</td>
</tr>
<tr>
<td>Vapour density</td>
<td>No information</td>
</tr>
<tr>
<td>Relative density</td>
<td>No information</td>
</tr>
<tr>
<td>Solubility (ies)</td>
<td>No information</td>
</tr>
<tr>
<td>Partition coefficient: n-octanol/water</td>
<td>No information</td>
</tr>
<tr>
<td>Auto-ignition temperature</td>
<td>No information</td>
</tr>
<tr>
<td>Decomposition temperature</td>
<td>No information</td>
</tr>
<tr>
<td>Viscosity</td>
<td>No information</td>
</tr>
<tr>
<td>Explosive properties</td>
<td>No information</td>
</tr>
<tr>
<td>Oxidising properties</td>
<td>No information</td>
</tr>
</tbody>
</table>

9.2. Other information

No information

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal handling condition.

10.2. Chemical stability

Stable under normal handling condition.

10.3. Possibility of hazardous reactions

May react with strong oxidizing agents. In case of heating above 150°C, may generate vapour of formaldehyde. React with water, alcohol, acid, alkali, strong oxidizing agents, catalytic metal or metal compound and generate hydrogen gas.

10.4. Conditions to avoid

Avoid sunlight. Store in a cool place.
10.5. Incompatible materials
Water, alcohol, acid, alkali, strong oxidizing agents, catalytic metal, metal compound

10.6. Hazardous decomposition products
In case of fire, toxic decomposition products (e.g. carbon oxide, silicon oxide or formaldehyde) may be generated.

SECTION 11: Toxicological information

11.1. Information on toxicological effects
Information on product:
No information

Information on ingredients:
Silicone
- Acute toxicity (oral): Rat LD₅₀ > 15,400 mg/kg
- Acute toxicity (dermal): Rabbit LD₅₀ > 2,000 mg/kg

Modified polysiloxane
- Acute toxicity (oral): Rat LD₅₀ > 2,000 mg/kg
- Serious eye damage/irritation: Slightly irritating

SECTION 12: Ecological information

12.1. Toxicity:
Information on product: No information

Information on ingredients:
Modified polysiloxane
- Aquatic acute toxicity: Fish (Oncorhynchus mykiss) 96hr LL₅₀ > 1,000 mg/L
- Aquatic chronic toxicity: No information

12.2. Persistence and degradability:
Information on product: No information

Information on ingredients: No information

12.3. Bioaccumulative potential:
Information on product: No information

Information on ingredients: No information

12.4. Mobility in soil:
Information on product: No information

Information on ingredients: No information
12.5. Results of PBT and vPvB assessment:

The product does not meet the PBT and vPvB criteria.

12.6. Other adverse effects:

No information

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Dispose of waste in accordance with applicable local, regional and international regulations and standards.

When disposing, consult to a certificated waste trader or local offices if they deal with the waste.

Used container should be recycled after cleaning or dispose of in compliance with related laws and local regulations.

Contents should be removed completely when dispose of empty containers.

SECTION 14: Transport information

14.1. UN number

Not applicable

14.2. UN proper shipping name

Not applicable

14.3. Transport hazard class(es)

Not applicable

14.4. Packing group

Not applicable

14.5. Environmental hazards

Not applicable

14.6. Special precautions for user

When transporting, avoid direct sunlight. Confirm no leakage to containers. When loading, prevent containers from falling, dropping off or damaging. Take preventive measures of collapse.

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

Not applicable

SECTION 15: Regulatory information

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

The product and its ingredients are not regulated by specific provisions related to protection of human health or the environment at EU level, e.g. not considered as SVHCs or POPs.

15.2. Chemical safety assessment

Not conducted

SECTION 16: Other information

Update history:

Date of issue: 14th SEPTEMBER, 2017

References:

Raw materials SDS documents

ACGIH, American Conference of Governmental Industrial Hygienists (2016) TLVs and BEIs.
Abbreviations

- PBT: Persistent, Bioaccumulative and Toxic substance
- POPs: Persistent Organic Pollutants
- STOT: Specific Target Organ Toxicity
- SVHC: Substances of Very High Concern
- vPvB: Very Persistent and Very Bioaccumulative

[Disclaimer]

This SDS has been prepared based on the best available information however, it may not be sufficient in some cases. It is user’s responsibility to modify or update any contents in this SDS regarding information on hazardous properties and/or instruction for safe handling of the product when they become available. Precautionary measures in this SDS are only applicable for normal handling conditions and it is necessary to take appropriate additional measures to ensure safe handling which depend on your specific use conditions or situations.