

Nikon SAFETY DATA SHEET

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

1.1. Product identifier

Product name: IMMERSION OIL TYPE F
Product code MXA22168 : 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 Europe B.V.
Department in Charge Marketing
Address Stroombaan 14, 1181 VX Amstelveen, The Netherlands

Telephone number +31-20-7099-000
Fax number —
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 —

1.4. Emergency telephone number

at 9 a.m ~5 p.m JST +81-45-853-8608

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification in accordance with EC No 1272/2008:

Skin Irrit. 2: H315
Eye Irrit. 2: H319
Aquatic Acute 1: H400
Aquatic Chronic 1: H410

2.2. Label elements

In accordance with EC No 1272/2008:

Pictogram



Signal word

Hazard Statements

Warning

H315: Causes skin irritation
 H319: Causes serious eye irritation
 H400: Very toxic to aquatic life
 H410: Very toxic to aquatic life with long lasting effects

Precautionary Statements

[Prevention]

P280: Wear protective gloves/protective clothing/eye protection/face protection.

[Emergency response]

P302+P352: IF ON SKIN: Wash with plenty of water.
 P337+P313: If eye irritation persists: Get medical advice/attention.

P362+P364: Take off contaminated clothing and wash it before reuse.

[Disposal]

P391: Collect spillage.

P501: Dispose of contents/ container in accordance with related laws and local/ regional regulations.

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

Product Name: IMMERSION OIL TVPE F

Information on ingredients:

Chemical name	CAS No.	EC No.	Index No.	REACH Registration No.*	Concentration (wt %)	Classification**
Polymer	-	-	-	-	About60	-
Cyclohexylbenzene	827-52-1	212-572-0	-	-	About40	Skin Irrit. 2: H315 Eye Irrit. 2: H319 Asp. Tox. 1: H304 Aquatic Acute 1: H400 Aquatic Chronic 1: H410
Others	-	-	-	-	<10	-

* 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

If you feel unwell, get medical attention and treatment.

IF ON SKIN

When the symptoms continue, consult a doctor/physician.

Rinse with plenty of water.

IF IN EYES

When the symptoms continue, consult a doctor/physician.

Rinse carefully with plenty of water for 15 - 20 minutes.

Remove contact lenses, if it can be easily removed off, then

continuously rinse. When the symptoms continue, consult a doctor/physician.
IF SWALLOWED Rinse mouth with water. Consult a doctor/physician immediately.

4.2. Most important symptoms and effects, both acute and delayed

Causes skin irritation
Causes serious eye irritation

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 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

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.

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.

Wash hands thoroughly after handling.

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.

Advice on general occupational hygiene:

Wash contaminated clothing before reuse.

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:

Oxidizing agents

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)

Immersion oil for microscope

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Acceptable concentration (exposure limit, biological exposure index)

EU IOELV	Not applicable
ACGIH TLV	Not applicable

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:

Respiratory protection	Wear appropriate protective mask or air aspirator as required.
Hand protection	If hand contact is possible, wear protective gloves.
Eye protection	Wear safety glasses or goggles if in eyes.
Skin and body protection	Wear protective clothing and apron if necessary.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance (physical state, form and colour)	Colourless transparent slightly viscous liquid
Odour	Pleasant odour
Odour threshold	No information
pH	No information
Melting point/freezing point	No information
Initial boiling point and boiling range	No information
Flash point	No information
Evaporation rate	No information
Flammability (solid, gas)	No information
Upper/lower flammability or explosive limits	No information
Vapour pressure	No information
Vapour density	No information
Relative density	0.8-1.0 (20°C)
Solubility (ies)	No information
Partition coefficient: <i>n</i> -octanol/water	No information
Auto-ignition temperature	No information
Decomposition temperature	No information
Viscosity	No information
Explosive properties	No information
Oxidising properties	No information

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

No hazardous reaction expected under normal handling.

10.4. Conditions to avoid

Avoid sunlight. Store in a cool place.

10.5. Incompatible materials

Oxidizing agents

10.6. Hazardous decomposition products

In case of fire, toxic decomposition products may be generated.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Information on product:

No information

Information on ingredients:

Cyclohexylbenzene

Acute toxicity (oral):	Rat $LDL_0=5$ g/kg
Acute toxicity (dermal):	Rabbit $LD_{50}>7,940$ mg/kg
Skin corrosion/irritation:	Rabbit test: severe (500 μ L/24h)
Aspiration hazard	Cyclohexylbenzene is a hydrocarbon and has a dynamic viscosity of 3.2 mm^2/s (20°C).

SECTION 12: Ecological information

12.1. Toxicity:

Information on product: No information

Information on ingredients:

Cyclohexylbenzene

Aquatic acute toxicity:	Fish (<i>Oryzias latipes</i>) 96h $LC_{50}= 1.2$ mg/L Crustacean (<i>Daphnia magna</i>) 48h $EC_{50}= 0.37$ mg/L Algae (<i>Selenastrum capricornutum</i>) 72h $EC_{50}= 0.69$ mg/L
Aquatic chronic toxicity:	No information

12.2. Persistence and degradability:

Information on product: No information

Information on ingredients:

Cyclohexylbenzene

Not readily degradable

12.3. Bioaccumulative potential:

Information on product: No information

Information on ingredients:

Cyclohexylbenzene

LogKow=4.88

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 3082

14.2. UN proper shipping name ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

14.3. Transport hazard class(es) 9

14.4. Packing group III

14.5. Environmental hazards 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: 18 th May, 2023

References:

Raw materials SDS documents

Relevant risk phrases of which do not appear elsewhere in this SDS

H304: May be fatal if swallowed and enters airways.

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.