



SAFETY DATA SHEET

Section 1: Identification

Product identifier used on the label;

Product name: IMMERSION OIL TYPE F
Product code MXA22168 : 30cc

Other means of identification;

No information

Recommended use of the chemical and restrictions on use;

Recommended use: Oil for microscope, oil-immersion objective lenses
Restrictions on use: No information

Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party;

Name: 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

Emergency phone number

+81-45-853-8608

Section 2: Hazard(s) identification

Classification of the chemical in accordance with paragraph (d) of §1910.1200;

Physical Hazards

Not classified

Health Hazards

Skin corrosion/irritation: Category2
Serious eye damage/eye irritation: Category2

Environmental Hazards

Hazardous to the aquatic environment (acute) Category1
Hazardous to the aquatic environment (chronic) Category1

Other Hazards

No information

Signal word, hazard statement(s), symbol(s) and precautionary statement(s) in accordance with paragraph (f) of §1910.1200;

Symbol(s)



Signal word

Hazard Statement(s)

Warning

Causes skin irritation
Causes serious eye irritation
Very toxic to aquatic life
Very toxic to aquatic life with long lasting effects

Precautionary Statement(s)

[Prevention]

Wash hands thoroughly after handling.
Avoid release to the environment.
Wear protective gloves/protective clothing/eye protection/face protection.

[Emergency response]

If on skin: Wash with plenty of water.
If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If skin irritation occurs: Get medical advice/attention.
If eye irritation persists: Get medical advice/attention.
Take off contaminated clothing and wash it before reuse.

[Disposal]

Collect spillage.
Dispose of contents/container in accordance with local/regional/national/international regulations.

Description of any hazards not otherwise classified;

No information

Ingredient with unknown acute toxicity in the mixture

Not applicable

Section 3: Composition/information on ingredients

Compositions (contents of the product)

Chemical name	CAS No.	Concentration/concentration ranges (wt %)
Polymer	-	About60
Cyclohexylbenzene	827-52-1	About40
Others	-	<10

Section 4: First-aid measures

Necessary first-aid measures by relevant routes of exposure;

IF INHALED

If you feel unwell, get medical attention and treatment.
When the symptoms continue, consult a doctor/physician.

IF ON SKIN

Rinse with plenty of water.
When the symptoms continue, consult a doctor/physician.

IF IN EYES	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.

Most important symptoms/effects, acute and delayed;

- Causes skin irritation
- Causes serious eye irritation

Indication of immediate medical attention and special treatment needed, if necessary;

No information

Section 5: Fire-fighting measures

Suitable (and unsuitable) 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.

Specific hazards arising from the chemical;

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

Special protective equipment and precautions for fire-fighters;

- 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

Personal precautions, protective equipment, and emergency procedures;

- Keep out except responsible personnel.
- Wear suitable protective equipment described in Section 8: Exposure controls/personal protection.
- Avoid release into the environment because product may cause local effects.

Methods and materials 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.

Section 7: Handling and storage

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.

Conditions for safe storage, including any incompatibilities

Technical measures:

- In the storage area, install adequate light and ventilation systems to handle hazardous materials.
- Take precautionary measures against static discharge.

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.

Section 8: Exposure controls/personal protection

Occupational Exposure Limits;

OSHA PEL	Not applicable
ACGIH TLV	Not applicable

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.

Individual protection measures, such as 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

Appearance (physical state, color, etc.)	Colorless transparent slightly viscous liquid
Odor	Pleasant odor
Odor 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
Vapor pressure	No information
Vapor 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

Other information

No information

Section 10: Stability and reactivity

Reactivity

Stable under normal handling condition.

Chemical stability

Stable under normal handling condition.

Possibility of hazardous reactions

No hazardous reaction expected under normal handling.

Conditions to avoid

Avoid sunlight. Store in a cool place.

Incompatible materials

Oxidizing agents

Hazardous decomposition products

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

Section 11: Toxicological information

Symptoms related to the physical, chemical and toxicological characteristics;

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).

Delayed and immediate effects and also chronic effects from short- and long-term exposure;

Causes skin irritation

Causes serious eye irritation

Numerical measures of toxicity (such as acute toxicity estimates);

Not applicable

Whether the chemical is listed in the NTP Report on Carcinogens or has been found to be a potential carcinogen in the IARC Monographs, or by OSHA;

IARC: Not listed as Group1, Group2A or Group 2B

NTP Report: Not listed

OSHA: Not listed

Section 12: Ecological information

Ecotoxicity:

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

Persistence and degradability:

Information on product: No information

Information on ingredients:

Cyclohexylbenzene

Not readily degradable

Bioaccumulative potential:

Information on product: No information

Information on ingredients:

Cyclohexylbenzene

LogKow=4.88

Mobility in soil:

Information on product: No information

Information on ingredients: No information

Other adverse effects:

No information

Section 13: Disposal considerations

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

UN number	3082
UN proper shipping name	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.
Transport hazard class(es)	9
Packing group	III
Environmental hazards	Applicable
Transport in bulk according to Annex II of MARPOL 73/78 and IBC code	Not applicable

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.

Section 15: Regulatory information

OSHA:	Hazardous chemical
TSCA inventory:	All ingredients in this product are listed on the TSCA Inventory.
TSCA SNUR:	Not listed
SARA Title III:	Section 302 (Extremely Hazardous Substances): Not listed Section 304 (Hazardous Substances): Not listed Section 313 (TRI Chemicals): Not listed
Clean Air Act:	This product does not contain any substances regulated as hazardous air pollutants under Section 112 of the Clean Air Act.

Clean Water Act: This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act.

Section 16: Other information, including date of preparation or last revision

Update history:

Date of issue: 01th September, 2017

References:

Raw materials SDS documents

[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.