

SAFETY DATA SHEET

Section 1. Identification of the material and the supplier

Product name: Microscopes-Immersion Liquids for Light Microscopy
Model name: IMMOIL-F30CC

Product Use: Oil for microscope, oil-immersion objective lenses

New Zealand Supplier: Olympus New Zealand Limited
Address: 15D Paul Matthews Drive
Albany, Auckland
Telephone: 0580-6596787
Fax Number: +64 9 836 3386

Australian Supplier: Olympus Australia Pty Ltd
Address: 3 Acacia Place, Notting Hill, VIC 3168, AUSTRALIA
Telephone: 1300-132-992

Emergency Numbers:
New Zealand: **0800 764 766 (National Poison Centre)**
Australia: **13 1126**

Manufacturer: OLYMPUS CORPORATION
Shinjuku Monolith, 3-1 Nishi-Shinjuku 2-chome, Shinjuku-ku,
Tokyo 163-0914, Japan

Date of SDS Preparation: 17 September 2013

Section 2. Hazards Identification

Australia NOHSC – Hazardous according to Worksafe Australia NOHSC 2011 National Code of Practice

New Zealand - This substance is hazardous according to the *HSNO (Minimum Degrees of Hazard) Regulations 2001*

Group Standard & EPA Approval Code:
Surface Coatings and Colourants (subsidiary) hazard – HSR002670

Pictograms



Toxic



Chronic



Ecotoxic

| HSNO Class. | Hazard Code | Hazard Statement | GHS Category |
|-------------|-------------|------------------|--------------|
|-------------|-------------|------------------|--------------|

| | | | |
|------|------|--------------------------------------|------------|
| 6.5B | H317 | May cause an allergic skin reaction. | Category 1 |
| 6.9B | H371 | May cause damage to organs | Category 2 |

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| | | | |
|------|------|--|------------|
| | | (kidneys) | |
| 6.9B | H373 | May cause damage to organs (adrenal, liver) through prolonged or repeated exposure | Category 2 |
| 9.1B | H411 | Toxic to aquatic life with long lasting effects. | Category 2 |

Prevention Code Prevention Statement

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| P103 | Read label before use. |
| P104 | Read safety data sheet before use |
| P260 | Do not breathe fumes or vapours. |
| P264 | Wash hands thoroughly after handling. |
| P270 | Do not eat, drink or smoke when using this product. |
| P272 | Contaminated work clothing should not be allowed out of the workplace. |
| P273 | Avoid release to the environment. |
| P280 | Wear protective clothing. |

Response Code Response Statement

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| P314 | Get medical advice/attention if you feel unwell. |
| P363 | Wash contaminated clothing before reuse. |
| P391 | Collect spillage. |
| P302 + P352 | IF ON SKIN: Wash with plenty of soap and water. |
| P309 + P311 | IF exposed or if you feel unwell: Call a POISON CENTER or doctor/physician. |
| P333 + P313 | If skin irritation or rash occurs: Get medical advice/attention. |

Storage Code Storage Statement

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| P405 | Store locked up. |
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Disposal Code Disposal Statement

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| P501 | Dispose of according to Local Regulations or Authorities |
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Section 3. Composition / Information on Ingredients

| Ingredients | Wt% | CAS NUMBER. |
|---|-----|-------------|
| 1-Pheny-1-(3,4-dimethylphenyl) ethane | 35% | 6196-95-8 |
| 1,4-Dimethyl-2-(1-phenylethyl) benzene | | 6165-51-1 |
| 1-Phenyl-1-(2,4-xylyl)ethane | | 6165-52-2 |
| Ethyl(phenylethyl) benzene | | 64800-83-5 |
| Other ingredients (non-hazardous) Trade secret and proprietary | 65% | |

Section 4. First Aid Measures

Routes of Exposure:

If in Eyes Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Apply continuous irrigation with water for at least 15 minutes holding eyelids apart. If eye irritation persists: Get medical advice.

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| If on Skin | Wash with plenty of soap and water. Take off contaminated clothing and wash before re-use. If skin irritation occurs: get medical advice/attention. |
| If Swallowed | Immediately induce vomiting and keep at rest and get medical attention. Rinse mouth. Get medical attention if needed. |
| If Inhaled | Remove person to fresh air. Remove contaminated clothing and loosen remaining clothing. Allow person to assume most comfortable position and keep warm. Keep at rest until fully recovered. Get medical advice if breathing becomes difficult. |

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| Section 5. Fire Fighting Measures |
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| Hazard Type | Combustible: This product burns but not easily ignited. |
| Hazards from decomposition products | Toxic gas and/or fume may generate by combustion. |
| Suitable Extinguishing media | Fire foam, carbon dioxide or dry chemical powder Unsuitable extinguishing media: Discharging cylinder shape water from fire hose may lead to spread fire to the surroundings |
| Precautions for firefighters and special protective clothing | Remove containers from fire area if it can be done without risk. For initial fire, use dry powder, carbon dioxide, etc. For large fire, it is effective to use fire foam, etc. to shut off air supply. Cool surrounding facilities, etc. with water spray. Take action from upwind. Wear air respirators, chemical protective clothing during fire-fighting. When extinguishing a fire in a confined area, be sure to wear self-contained breathing apparatus |
| HAZCHEM CODE | 3Z |

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| Section 6. Accidental Release Measures |
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Personal precautions, protective equipment and emergency procedures

For non-emergency personnel:

Stay in the windward. Immediately eliminate all sources of ignition such as open flame, hot surfaces, etc.

For emergency responders:

Wear suitable protective equipment (see Section 8. Exposure Controls and Personal Protective Equipment) to avoid contact with eyes and skin or inhalation. Ventilate before entering a confined area.

Environmental precautions

Do not release to the environment. Care should be made so that any adverse effects on the environment will not cause by discharging the product into rivers, etc.

Methods and material for containment and cleaning up

For small spills, absorb with dry earth, sawdust, sand, etc. and collect into a closed container then dispose of them.

For large spills, dike with earth and sand, etc. to prevent further spills and cover liquid surface with foam and collect into an empty container as much as possible. Ground all equipment used to handle spills. Stop leakage if it can be done without risk.

Section 7. Handling and Storage

Handling

- Read label and safety data sheet before use.
- Keep away from sources of ignition such as open flame, static discharge, electric sparks,
- Use non-sparking tools.
- Do not inhale or swallow.
- Avoid contact with eyes and skin.
- Prevent leakage.
- Use only outdoors or in a well-ventilated area.
- Wash hands thoroughly after handling.
- Contaminated work clothing should not be allowed out of the workplace.
- Do not breathe fumes or vapours.
- Wash hands thoroughly after handling.
- Do not eat, drink or smoke when using this product.
- Contaminated work clothing should not be allowed out of the workplace.
- Avoid release to the environment.
- Wear protective clothing.

Storage

- Store locked up.
- Keep container tightly closed and store in a well-ventilated place.

Section 8 Exposure Controls / Personal Protection

Engineering Controls

Handle the product only under conditions where sufficient ventilation is provided and/or in a closed system. Install eye washer and safety shower near handling and storage area and display where they are.

Personal Protection

- Eyes:** Wear suitable safety glasses
- Skin:** Wear oil-resistant protective gloves and work clothing as appropriate
- Respiratory:** Wear gas mask for organic gas, air-supplied respirators, air respirators, etc.

Section 9 Physical and Chemical Properties

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| Appearance | Clear and colourless, slightly viscous liquid |
| Odour | Faint aromatic odour |
| Vapour density | ≥ 1.0 (Air=1) |
| Flash Point | 126 ^o C |
| Initial Boiling Point and range | $\geq 200^{\circ}\text{C}$ (distillation range) |
| Auto-ignition Temperature | $> 392^{\circ}\text{C}$ |
| Relative Density | 0.9169 g/cm ³ (at 15 ^o C) |
| Solubility in Water | Almost insoluble in water |
| Kinematic Viscosity | 173mm ² /s (at 40 ^o C) |

Section 10. Stability and Reactivity

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| Stability of Substance | This product is stable to light or heat. |
| Conditions to Avoid | Keep away from sources of ignition at all times |
| Incompatible Materials | Keep away from oxidising agents |

Section 11 Toxicological Information

Information on toxicological effects

Information on product:

- Acute toxicity (oral): LD₅₀ (rats) > 2,000 mg/kg
- Skin irritation: Continuous or repeated skin contact causes mild irritation to human. Mild irritating to rabbits.
- Eye irritation: Causes minimum eye irritation to rabbits.
- Skin sensitisation: Continuous or repeated skin contact may cause very mild allergic dermatitis in human.

Information on ingredients (mixture of four substances):

- Acute toxicity (oral): LD₅₀ (rats) = 1,940 mg/kg (male), 2,200 mg/kg (female)
- Acute toxicity (inhalation): LC₅₀ (rats) > 1.8 g/m³
- Skin irritation: Moderate irritating to rabbit skin. (Primary Irritation Index: 2.8)
- Eye irritation: Not irritating to rabbit eyes.
- Skin sensitisation: Negative in a guinea pigs skin sensitization test (Buehler method). Positive in a guinea pigs skin sensitization test (GMPT: Maximization method).
- Germ cell mutagenicity: (*in vitro*) Negatives in an Ames and chromosome aberration (bacteria) studies.
- Carcinogenicity: No carcinogenic effect or promotion of carcinogen was observed in a rat 24-months study.
- Reproductive toxicity: No teratogenic activity in mice was observed.
- STOT-single exposure: May cause headache, nausea or dizziness.
- Other information: Bio-magnification rate after 29 days in mice at a dose level of 1.5 mg/kg (2days): 0.02%

Information on ingredient (1,4-Dimethyl-2-(1-phenylethyl) benzene):

- Germ cell mutagenicity: (*in vitro*) Negatives in an Ames and a chromosome aberration studies.
- Reproductive toxicity: No teratogenic effects were observed in an animal study.
- STOT-single exposure: Decreased body weight gain in 1,000 mg/kg or higher dose levels, and effects on kidneys in 2,000 mg/kg or higher dose levels were observed in a rat single dose oral study.
- STOT-repeated exposure: Effects on adrenal and liver were observed in combined repeated dose toxicity study with the reproduction/developmental toxicity screening test (oral dose studies with adult rats).
 - LOAEL = 12.5 mg/kg/day (male)
 - LOAEL = 200 mg/kg/day (female)

Section 12. Ecotoxicological Information

HSNO Classes: 9.1B = Toxic to aquatic life with long lasting effects.

Do not allow to enter waterways.

Information on ingredients (1,4-Dimethyl-2-(1-phenylethyl) benzene):

Acute toxicity: Crustacea (*Daphnia magna*) 48-hr EC₅₀ = 0.39 mg/L

Section 13. Disposal Considerations

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Dispose of the remaining product and container in accordance with relevant laws and local regulation.

Wastes should be dealt by a licensed industrial waste trader and fully notify them of the information on hazardous properties and precautions regarding safe handling.

DO NOT discharge waste water or cleaning water containing this product directly into rivers, etc. Do not dump into sewers, on the ground or into any body of water.

Section 14 Transport Information

This product is classified as a Dangerous Good for transport in NZ ; NZS 5433:2012 and under Australian Dangerous Goods Code ADG7 and NOHSC:1008(2004)

Road and Rail Transport

UN No: 3082
Class-primary 9
Packing Group III
Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

Air Transport

UN No: 3082
Class-primary 9
Packing Group III
Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

Marine Transport

UN No: 3082
Class-primary 9
Packing Group III
Proper Shipping Name: ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S.

Section 15 Regulatory Information

Australia:

Australia NOHSC – Hazardous according to Safe Work Australia NOHSC 2011 National Code of Practice

Poison Schedule No: 5

New Zealand:

EPA Approval No: Surface Coatings and Colourants (subsidiary) hazard – HSR002670

HSNO Classification: 6.5B, 6.9B, 9.1B

HSNO Controls:

Trigger quantities for this substance:

| | Trigger Quantity |
|--|------------------|
| Approved Handler | Not required |
| Location Certificate | Not required |
| Tracking Trigger Quantities | Not required |
| Signage Trigger Quantities | 1000 L (9.1B) |
| Emergency Response Plan trigger Quantities | 1000 L (9.1B) |

Section 16 Other Information

1. HSNO Approved Code of Practice: Preparation of Safety Data Sheets, September 2006.

Disclaimer

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Please contact the New Zealand/Australian supplier, if further information is required.

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