

SECTION 1: Identification of the substance/mixture and of the company/undertaking**1.1. Product identifier**

Product form : Mixture
Product name : IMMOIL-F30CC#2

1.2. Other means of identification

No additional information available

1.3. Recommended use of the chemical and restrictions on use

Recommended use : Microscopes-Immersion Liquids for Light Microscopy

1.4. Supplier's details**Manufacturer**

OLYMPUS CORPORATION
Shinjuku Monolith, 3-1 Nishi-Shinjuku 2-chome, Shinjuku-ku
163-0914 Tokyo - Japan
T +81-120-58-0414 / +81-3-3340-2111 - F +81-3-6901-4251

Distributor

OLYMPUS SINGAPORE PTE LTD.
438B Alexandra Road #03-07/12, Alexandra Technopark Blk B,
Singapore 119968
T (65) 6834 0010 (9:00-17:00)

1.5. Emergency telephone number

Emergency number : +44-1865-407333 (Carechem24 English)

SECTION 2: Hazards identification**2.1. Classification of the substance or mixture**

Health hazards : Skin sensitisation, Category 1
Environmental hazards : Hazardous to the aquatic environment — Chronic Hazard, Category 2

2.2. Label elements

Hazard pictograms (GHS SG) :



Signal word (GHS SG) :

Warning

Hazard statements (GHS SG) :

May cause an allergic skin reaction. (H317)
Toxic to aquatic life with long lasting effects. (H411)

Prevention

: Avoid breathing dust/fume/gas/mist/vapours/spray. (P261)
Contaminated work clothing should not be allowed out of the workplace. (P272)
Avoid release to the environment. (P273)
Wear protective gloves/protective clothing/eye protection/face protection. (P280)

Response

: IF ON SKIN: Wash with plenty of water. (P302+P352)
Take off contaminated clothing and wash it before reuse. (P362+P364)
If skin irritation or rash occurs: Get medical advice/attention. (P333+P313)
Collect spillage. (P391)

Disposal

: Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation. (P501)

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients**3.1. Substances**

Not applicable

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According to SS 586 Part 3: 2014

3.2. Mixtures

| Name | Synonyms | Concentration (%) | Formula | Product identifier |
|--|--|-------------------|---------|----------------------|
| Polyisobutylene | 1-Propene, 2-methyl-, homopolymer Polyisobutene Poly(4+) isobutylene POLYISOBUTENE | 30 - 60 | (C4H8)x | (CAS-No.) 9003-27-4 |
| Benzene, 1,2-dimethyl-4-(1-phenylethyl)- | Ethane, 1-phenyl-1-(3,4-xylyl) Ethane, 1-phenyl-1-(3,4-xylyl)- 4-(1-Phenylethyl)-o-xylene Phenyl xylyl ethane Phenyl-1-(3,4-dimethyl)phenylethane 1-Phenyl-1-(3,4-dimethylphenyl)ethane | 10 - 15 | C16H18 | (CAS-No.) 6196-95-8 |
| Benzene, 2,4-dimethyl-1-(1-phenylethyl)- | 4-(1-Phenylethyl)-m-xylene 2,4-Dimethyl-1-(1-phenylethyl)benzene | 7 - 13 | C16H18 | (CAS-No.) 6165-52-2 |
| Triisopropylbenzene | Benzene, 1,3,5-tris(1-methylethyl)- 1,3,5-Tris(1-methylethyl)benzene 1,3,5-Triisopropylbenzene | 7 - 13 | C15H24 | (CAS-No.) 717-74-8 |
| Benzene, ethyl(phenylethyl)- | Ethyl(phenylethyl)benzene | 5 - 10 | C16H18 | (CAS-No.) 64800-83-5 |
| Benzene, 1,4-dimethyl-2-(1-phenylethyl)- | 2-(1-Phenylethyl)-p-xylene 1,4-Dimethyl-2-(1-phenylethyl)benzene 1-Phenyl-1-(2,5-xylyl)ethane | 3 - 7 | C16H18 | (CAS-No.) 6165-51-1 |
| 1,3-Butadiene, 2-methyl-, homopolymer | Polyisoprene POLYISOPRENE Isoprene oligomer Isoprene oligomers 1,3-Butadiene, 2-methyl-, oligomers 2-Methylbuta-1,3-diene, oligomers | 3 - 7 | (C5H8)x | (CAS-No.) 9003-31-0 |

Comments : *Chemical name, CAS number and/or exact concentration have been withheld as a trade secret.

SECTION 4: First aid measures

4.1. Description of first aid measures

| | |
|--------------|--|
| Inhalation | : If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical advice/attention if you feel unwell. |
| Skin contact | : IF ON SKIN: Wash with plenty of Water. Take off contaminated clothing and wash it before reuse. If skin irritation or rash occurs: Get medical advice/attention. |
| Eye contact | : IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention. |
| Ingestion | : Do not induce vomiting without medical advice. Never give anything by mouth to an unconscious person. Get medical advice/attention if you feel unwell. |

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

| | |
|-------------------------------------|---|
| Symptoms/effects after inhalation | : May cause irritation to the respiratory tract. |
| Symptoms/effects after skin contact | : May cause skin irritation. Repeated exposure may cause skin dryness or cracking. May cause an allergic skin reaction. |
| Symptoms/effects after eye contact | : May cause eye irritation. Symptoms may include discomfort or pain, excess blinking and tear production, with possible redness and swelling. |
| Symptoms/effects after ingestion | : May be harmful if swallowed. May cause gastrointestinal irritation, nausea, vomiting and diarrhea. |

4.3. Indication of any immediate medical attention and special treatment needed

Symptoms may be delayed. In case of accident or if you feel unwell, seek medical advice immediately (show the label where possible).

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According to SS 586 Part 3: 2014

SECTION 5: Firefighting measures

5.1. Extinguishing media

- Suitable extinguishing media : Carbon dioxide (CO₂), dry chemical powder, foam.
Unsuitable extinguishing media : Do not use water jet.

5.2. Special hazards arising from the substance or mixture

- Fire hazard : Products of combustion may include, and are not limited to: oxides of carbon.
Reactivity : No dangerous reactions known under normal conditions of use.

5.3. Special Protective actions for the fire fighters

- Protection during firefighting : Keep upwind of fire. Wear full fire fighting turn-out gear (full Bunker gear) and respiratory protection (SCBA).

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Use personal protection recommended in Section 8. Isolate the hazard area and deny entry to unnecessary and unprotected personnel.

6.1.1. For non-emergency personnel

- Emergency procedures : Ventilate spillage area. Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapours/spray.

6.1.2. For emergency responders

- Protective equipment : Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".

6.2. Environmental precautions

Avoid release to the environment. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

- For containment : Contain and/or absorb spill with inert material (e.g. sand, vermiculite), then place in a suitable container. Do not flush to sewer or allow to enter waterways. Use appropriate Personal Protective Equipment (PPE). Collect spillage.

- Methods for cleaning up : Take up liquid spill into absorbent material. Sweep or shovel spills into appropriate container for disposal.

6.4. Reference to other sections

For further information refer to section 8: "Exposure controls/personal protection".

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Precautions for safe handling : Avoid contact with skin and eyes. Avoid breathing dust/fume/gas/mist/vapours/spray. Do not swallow. Handle and open container with care. When using do not eat, drink or smoke.
Hygiene measures : Wash contaminated clothing before reuse. Always wash hands after handling the product. Contaminated work clothing should not be allowed out of the workplace.

7.2. Conditions for safe storage, including any incompatibilities

- Storage conditions : Keep out of the reach of children. Store tightly closed in a dry, cool and well-ventilated place.

7.3. Specific end use(s)

Not available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

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According to SS 586 Part 3: 2014

8.2. Monitoring

No additional information available

8.3. Appropriate engineering controls

Appropriate engineering controls : Ensure good ventilation of the work station.

8.4. Personal protective equipment

Hand protection : Wear suitable gloves resistant to chemical penetration

Eye protection : Safety glasses or goggles are recommended when using product.

Skin and body protection : Wear suitable protective clothing

Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Environmental exposure controls : Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

| | |
|---|-----------------------------------|
| Physical state | : Liquid |
| Colour | : No data available |
| Odour | : No data available |
| Odour threshold | : No data available |
| pH | : No data available |
| Relative evaporation rate (butylacetate=1) | : No data available |
| Melting point | : No data available |
| Freezing point | : No data available |
| Boiling point | : < 200 °C |
| Flash point | : 134 °C (Cleveland Open Formula) |
| Auto-ignition temperature | : No data available |
| Decomposition temperature | : No data available |
| Flammability (solid, gas) | : Not flammable |
| Vapour pressure | : No data available |
| Relative vapour density at 20 °C | : ≤ 1 |
| Relative density | : 0.9169 (15°C) |
| Solubility | : Insoluble in water |
| Partition coefficient n-octanol/water | : No data available |
| Partition coefficient n-octanol/water (Log Kow) | : No data available |
| Viscosity, kinematic | : No data available |
| 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 dangerous reactions known under normal conditions of use.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

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10.4. Conditions to avoid

Heat.

10.5. Incompatible materials

None known.

10.6. Hazardous decomposition products

May include, and are not limited to: oxides of carbon.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral) : Not classified.

Acute toxicity (dermal) : Not classified.

Acute toxicity (inhalation) : Not classified.

| | |
|---------------------------------|---|
| Unknown acute toxicity (GHS SG) | 94% of the mixture consists of ingredient(s) of unknown acute toxicity (Oral) 94% of the mixture consists of ingredient(s) of unknown acute toxicity (Dermal) 94% of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Vapours)) |
|---------------------------------|---|

Skin corrosion/irritation : Not classified.

Serious eye damage/irritation : Not classified.

Respiratory or skin sensitisation : May cause an allergic skin reaction.

Germ cell mutagenicity : Not classified.

Carcinogenicity : Not classified.

Reproductive toxicity : Not classified.

STOT-single exposure : Not classified.

STOT-repeated exposure : Not classified.

Aspiration hazard : Not classified.

Other information : Likely routes of exposure: ingestion, inhalation, skin and eye.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Toxic to aquatic life with long lasting effects.

Unknown hazards to the aquatic environment (GHS SG) : Contains 91 % of components with unknown hazards to the aquatic environment

Hazardous to the aquatic environment, short-term (acute) : Not classified.

Hazardous to the aquatic environment, long-term (chronic) : Toxic to aquatic life with long lasting effects.

Other information : No other effects known.

12.2. Persistence and degradability

| | |
|-------------------------------|------------------|
| IMMOIL-F30CC#2 | |
| Persistence and degradability | Not established. |

12.3. Bioaccumulative potential

| | |
|---------------------------|------------------|
| IMMOIL-F30CC#2 | |
| Bioaccumulative potential | Not established. |

12.4. Mobility in soil

| | |
|-----------------------|-------------------------------------|
| IMMOIL-F30CC#2 | |
| Mobility in soil | No additional information available |

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12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

Ozone : Not classified.
Other adverse effects : No additional information available

SECTION 13: Disposal considerations

Product/Packaging disposal recommendations : Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

SECTION 14: Transport information

14.1. UN number

UN-No.(UN RTDG) : 3082
UN-No. (IMDG) : 3082
UN-No. (IATA) : 3082

14.2. Proper Shipping Name

Proper Shipping Name (UN RTDG) : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Benzene, 1,2-dimethyl-4-(1-phenylethyl)-, Benzene, 1,4-dimethyl-2-(1-phenylethyl)-)
Proper Shipping Name (IMDG) : ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (Benzene, 1,2-dimethyl-4-(1-phenylethyl)-, Benzene, 1,4-dimethyl-2-(1-phenylethyl)-)
Proper Shipping Name (IATA) : Environmentally hazardous substance, liquid, n.o.s. (Benzene, 1,2-dimethyl-4-(1-phenylethyl)-, Benzene, 1,4-dimethyl-2-(1-phenylethyl)-)

14.3. Transport hazard class(es)

UN RTDG

Transport hazard class(es) (UN RTDG) : 9
Danger labels (UN RTDG) : 9



IMDG

Transport hazard class(es) (IMDG) : 9
Danger labels (IMDG) : 9



IATA

Transport hazard class(es) (IATA) : 9
Danger labels (IATA) : 9



14.4. Packing group

Packing group (UN RTDG) : III

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Packing group (IMDG) : III
Packing group (IATA) : III

14.5. Environmental hazards

Dangerous for the environment : Yes
Marine pollutant : Yes
Other information : No supplementary information available.

14.6. Special precautions for user

Special transport precautions : Do not handle until all safety precautions have been read and understood.

- UN RTDG

Special provisions (UN RTDG) : 274, 331, 335, 375
Limited quantities (UN RTDG) : 5L
Excepted quantities (UN RTDG) : E1
Packing instruction (UN RTDG) : P001, IBC03, LP01
Special packing provisions (UN RTDG) : PP1
Portable tank and bulk container special instructions (UN RTDG) : T4
Portable tank and bulk container special provisions (UN RTDG) : TP1, TP29

- IMDG

No data available

- IATA

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. National regulations

Arms and Explosives Act : Not applicable
Chemical Weapons (Prohibition) Act : Not applicable
Environmental Protection and Management (Air Impurities) Regulations : Not applicable
Environmental Protection and Management Act (Hazardous Substances) : Not applicable
Environmental Public Health (Quality of Piped Drinking Water) Regulations : Not applicable
Fire Safety Act/Fire Safety (Petroleum and Flammable Materials) Regulations : Not applicable
Maritime and Port Authority of Singapore (Dangerous, Petroleum and Explosives) Regulations : Not applicable
Misuse of Drugs Act : Not applicable
Poisons Act : Not applicable
Poisons Rules : Not applicable
Hazardous waste (Control of export, import and transit) Act : Not applicable
Strategic goods (Control) Act : Not applicable

15.2. International Regulations

No additional information available

15.3. Chemical inventory status

No additional information available

SECTION 16: Other information

Version : 1.0
Issue date : 16/10/2020
Revision date : 16/10/2020

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| | |
|----------------------------|--|
| Expiry date | : 16/10/2025 |
| Data sources | : Work Safety and Health Act, Singapore Standard SS 586 Specification for Hazard Communication for Hazardous Chemicals and Dangerous Goods, ECHA (European Chemicals Agency), RTDG (Recommendations on the Transport of Dangerous Goods), ACGIH (American Conference of Government Industrial Hygienists), IARC - International Agency for Research on Cancer. |
| Abbreviations and acronyms | : ACGIH - American Conference of Governmental Industrial Hygienists BCF – Bioconcentration Factor CAS Number - Number assigned to a chemical substance by the Chemical Abstract Service EC50 – Median Effective Concentration GHS - Globally Harmonized System of Classification and Labelling of Chemicals IDLH – Immediately Dangerous to Life or Health LC50 - Average lethal concentration; Lethal Concentration 50: Amount of a substance like gas, vapor mist or dust in a volume of air, statistically calculated, the exposure of which it is expected that 50% of the animals that experienced it are expected to die. When dealing with vapors or gases, it is stated in ppm, and when dust or mist, it is expressed in mg/l or in mg/m ³ . LD50 - Average lethal dose; Lethal Dose 50: It is the amount of a substance (milligrams or grams per kilogram of body weight of the test subject) statistically obtained, and administered by mouth or dermally, which causes the death to 50% of a group of experimental animals. mg/l - Milligram per liter. Unit of concentration. mg/m ³ - Milligram per cubic meter. Unit of concentration. mg/kg - Milligram per kilogram. Unit of concentration. ppm - Parts per million. Volume/volume ratio. TLV-TWA - Threshold limit value of time weighted average exposure TLV-STEL - Threshold limit value of short-term exposure UN Number - Identification number for the transportation of hazardous chemical substances assigned by the United Nations Organization. |
| Other information | : None. |

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