

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

Product form : Mixture  
 Product name : IMMOIL-8CC\_IMMOIL-500CC#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	50 - 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	10 - 20	C16H18	(CAS-No.) 6165-52-2
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	5 - <10	C16H18	(CAS-No.) 6165-51-1
Benzene, ethyl(phenylethyl)-	Ethyl(phenylethyl)benzene	5 - 10	C16H18	(CAS-No.) 64800-83-5

\*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).

## SECTION 5: Firefighting measures

### 5.1. Extinguishing media

Suitable extinguishing media	: Use extinguishing media appropriate for surrounding fire.
Unsuitable extinguishing media	: None known.

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### 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 : 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". For further information refer to section 13.

## 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

### 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

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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
Appearance	: Colourless liquid.
Colour	: Colourless
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	: 154 °C (Cleveland Open Cup)
Auto-ignition temperature	: < 300 °C
Decomposition temperature	: No data available
Flammability (solid, gas)	: Not flammable
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: 0.918 (15 °C)
Solubility	: No data available
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.

### 10.4. Conditions to avoid

Heat.

### 10.5. Incompatible materials

None known.

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### 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)	27% of the mixture consists of ingredient(s) of unknown acute toxicity (Oral) 27% of the mixture consists of ingredient(s) of unknown acute toxicity (Dermal) 27% of the mixture consists of ingredient(s) of unknown acute toxicity (Inhalation (Vapours))
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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 72 % 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

<b>IMMOIL-8CC_IMMOIL-500CC#2</b>	
Persistence and degradability	Not established.

### 12.3. Bioaccumulative potential

<b>IMMOIL-8CC_IMMOIL-500CC#2</b>	
Bioaccumulative potential	Not established.

### 12.4. Mobility in soil

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Mobility in soil	No additional information available

### 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

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### 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

Packing group (IMDG) : III

Packing group (IATA) : III

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### 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  
Expiry date : 16/10/2025

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## Safety Data Sheet

According to SS 586 Part 3: 2014

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 <sup>3</sup> . 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 <sup>3</sup> - 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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