Material Safety Data Sheet

Section 1: Product and Company Identification

Product Name: Cargille Immersion Oil Types A & B Code 1248
Cat. No. 16482 - Type A; #16484 - Type B

Conditions of Intended Use: (ABBR. C. I.U.) As a Microscope Immersion Oil at normal room pressure (760 mm Hg), temperature 45 °F to 104 °F in a non-misted / non-airborne state in a room having normal air changes (2) / HR., in a trained and supervised laboratory / industrial setting using standard GL / GM procedures. See sections 7 and 8.

Manufacturer: Cargille Laboratories
Cedar Grove, NJ 07009 USA

Emergency Contact Numbers:
973-239-6633 - Cargille Laboratories (8:30 AM - 4:30 PM ET Weekdays)
800-424-3900 - 24 Hour Chemtrec

Section 2: Hazardous Composition Identification

<table>
<thead>
<tr>
<th>Components</th>
<th>Common Name(s)</th>
<th>OSHA PEL Ceiling</th>
<th>ACGIH TLV T.W.A</th>
<th>Other Limits Recommended</th>
</tr>
</thead>
<tbody>
<tr>
<td>Trade Secret</td>
<td>Hydrogenated Terphenyl</td>
<td>N.E.</td>
<td>cubic meter **</td>
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<td></td>
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<td></td>
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<td>Polybutenes</td>
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** PEL Ceiling & TLV T.W.A. If any should not occur if C.I.U. and sections 7 & 8 followed.
Section 3: Hazards Identification

Emergency Overview: This product is not expected to present any unusual hazards in proper use as per the C.I.U.

Potential Health Effects: None known at C.I.U.

Chronic Effects: None known at C.I.U.

Section 4: First Aid Measures

Eyes: Flush with water, slight temporary irritation possible (consult physician)

Skin Exposure: Prompt soap and water wash.

Inhalation: (Not likely at C.I.U.) if concern arises, remove to fresh air.

Ingestion: Low order of toxicity, first aid normally not needed (consult physician)

Special Notes: N/A

Section 5: Fire Fighting Measures

Flash Point: > 325 °F (163 °C) C.O.C.

LEL / UEL: N.D.A.

Extinguishing Media: Carbon dioxide, foam, dry chemical or any class B agent.

Personal Protective Equip.: None

Special Procedures: None

Unusual Fire and Explosion Hazards: None

Hazardous Decomposition: N.D.A.

Section 6: Accidental Release Measures

Evacuation Procedures & Safety: None necessary due to the small quantities involved and the physical properties of the material involved.

Containment of Spill: Absorb using lab wipes. Place in plastic (polyethylene or polypropylene) container, cap or twist tie the closure.

Cleanup and Disposal of Spill: All chemical disposals must be in accordance with current Local, State, Provincial, National and International regulations. Product is insoluble in water. Prevent from entering sewers or drains.

Section 7: Handling and Storage

Min / Max Storage Temperature: 65 °F and 90 °F (18 °C and 32 °C)

Handling: Use normal GM procedures. Minimize Contact. Avoid continual direct sunlight, vaporizing or atomizing.

Storage:
Section 8 : Exposure Controls / Personal Protection

Ingestion : Low order of toxicity, first aid normally not needed ( consult physician )
Eye Contact : Flush with water, slight temporary irritation possible ( consult physician )
Skin Contact : Prompt soap and water wash.
Respiratory Protection : ( Not likely at C.I.U. ) if concern arises, remove to fresh air.

Exposure Guidelines :

(* = Not mandatory except as good laboratory and industrial practices. Always use good work practices as to housekeeping, personal hygiene, use of chemical lab apron, splash goggles, avoidance of vapors, prolonged or repeated skin contact.)

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** PEL Ceiling & TLV T.W.A. If any should not occur if C.I.U. and sections 7 & 8 followed.

Section 9 : Physical and Chemical Properties

Physical State : Liquid
Color : Yellow
Odor : Slight characteristic odor.

Specific Gravity ( Water = 1 ) Temp. 23 °C / 73 °F : .9
Vapor Density ( Air = 1 ) at ( mm Hg & temp. ) 760/1013.25 hPa 23 °C / 73 °F : ca 1
Vapor Pressure in mm Hg ( temp. ) 23°C / 73 °F : < 0.1
Boiling Point at 760 mm Hg 340 °C / 644 °F : 644 °F
Solubility in Water at ( mm Hg & temp. ) 760/1013.25 hPa 23 °C / 73 °F : NIL
Evaporation rate at 760 mm Hg & 23 °C / 73 °F ( mineral oil = 1 ) : ca 1
Melting Point : < 32 °F
Section 10: Stability and Reactivity

Chemical Stability: Stable
Hazardous Polymerization: Will not occur
Conditions to Avoid: Heat above 150 °F
Chemical Incompatibility: Strong oxidizers
Hazardous Decomposition: N.D.A.

Section 11: Toxicological Information

Acute Data
Ingestion: None Known at C.I.U.
Skin Exposure: None Known at C.I.U.
Eye Contact: None Known at C.I.U.
Inhalation: None Known at C.I.U.

Chronic Data
Not likely at C.I.U.
No evidence of carcinogenic activity.
No evidence of mutagenic activity.

Section 12: Ecological Information

Eco-Acute Toxicity: N.D.A.
Environmental Fate: N.D.A.

Section 13: Disposal Considerations

Procedure:
All chemical disposals must be in accordance with current Local, State, Provincial, National and International regulations.

Section 14: Transportation Information

Proper Shipping Name: N/A
Hazard Class: N/A
UN Number: This product is not regulated by DOT
Special Information: N/A
Packing Group: N/A

Section 15: Regulatory Information

Workplace Classification WHMIS: Product is not considered hazardous
US & Puerto Rico TSCA Status: Yes Toxic Substances Control Act Inventory
Canada DSL: Yes Domestic Substances List
Europe EINECS: Yes European Inventory of New and Existing Chemicals
Japan ENCS: Yes Japanese Inventory of Existing and New Chemical Substances
Section 16 : Other Information

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