



Cargille Immersion Oil Type A & B

Safety Data Sheet

According to Regulation (EC) No. 453/2010

Revision date: 15/07/2015

Date of issue: 15/07/2015

Version: 1.0

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Mixture
Product Name : Cargille Immersion Oil Type A & B
Product code : Type A & B, Catalog #16482 & 16484

1.2. Relevant identified uses of the substance or mixture and uses advised against

1.2.1. Relevant identified uses

Use of the substance/mixture : For professional and R&D use only. Conditions of Intended Use: (ABBR. C.I.U.) As a Microscope Immersion Oil at normal room pressure 101,32 hPa (760 mm Hg), temperature 7°C to 40°C (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 Good Laboratory/Good Manufacturing procedures.

Note: Product normally sold in ¼ oz (7.4cc), 1 oz (30cc), 4 oz (120cc), 16 oz (480cc), and gallon (3.84L) quantities. Used in single drop to a few cubic centimeters per application. See requisitioner for specific quantities involved.

1.2.2. Uses advised against

No additional information available

1.3. Details of the supplier of the safety data sheet

Cargille Laboratories
55 Commerce Road
Cedar Grove, NJ 07009-1289
973-239-6633

www.cargille.com

1.4. Emergency telephone number

Emergency number : 800-424-9300 CHEMTREC (in US); +1 703-527-3887 CHEMTREC (International and Maritime)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Skin Irrit. 2 H315
Aquatic Acute 1 H400
Aquatic Chronic 3 H412

Full text of H-phrases: see section 16

Classification according to Directive 67/548/EEC [DSD] or 1999/45/EC [DPD]

N; R50/53

Xi; R38

Full text of R-phrases: see section 16

Adverse physicochemical, human health and environmental effects

No additional information available

2.2. Label elements

Labelling according to Regulation (EC) No. 1272/2008 [CLP]

Hazard pictograms (CLP) :



Signal word (CLP) : Warning

Hazard statements (CLP) : H315 - Causes skin irritation
H400 - Very toxic to aquatic life
H412 - Harmful to aquatic life with long lasting effects

Precautionary statements (CLP) : P264 - Wash hands, forearms, and other exposed areas thoroughly after handling.
P273 - Avoid release to the environment.
P280 - Wear protective gloves, protective clothing, and eye protection.
P302+P352 - IF ON SKIN: Wash with plenty of water.

Cargille Immersion Oil Type A & B

Safety Data Sheet

According to Regulation (EC) No. 453/2010

P321 - Specific treatment (see section 4 on this SDS).
P332+P313 - If skin irritation occurs: Get medical advice/attention.
P362+P364 - Take off contaminated clothing and wash it before reuse.
P391 - Collect spillage.
P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations.

2.3. Other hazards

Other hazards not contributing to the classification : Exposure may aggravate those with pre-existing eye, skin, or respiratory conditions.

SECTION 3: Composition/information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

Name	Product identifier	%	Classification according to Directive 67/548/EEC
Proprietary*	Proprietary*	35,1	Not classified
Proprietary*	Proprietary*	34,1	R53
Proprietary*	Proprietary*	25,7	Xi; R38 Xn; R65
Polyphenyls, quater- and higher, partially hydrogenated	(CAS No) 68956-74-1 (EC no) 273-316-1	3,92	Not classified
Terphenyls	(CAS No) 26140-60-3 (EC no) 247-477-3	1,18	N; R50/53

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Proprietary*	Proprietary*	35,1	Asp. Tox. 1, H304
Proprietary*	Proprietary*	34,1	Aquatic Chronic 4, H413
Proprietary*	Proprietary*	25,7	Skin Irrit. 2, H315 Asp. Tox. 1, H304
Polyphenyls, quater- and higher, partially hydrogenated	(CAS No) 68956-74-1 (EC no) 273-316-1	3,92	Not classified
Terphenyls	(CAS No) 26140-60-3 (EC no) 247-477-3	1,18	Aquatic Chronic 1, H410

*The specific chemical identity and/or exact percentage of composition have been withheld as a trade secret.

Full text of R- and H-phrases: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general : Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label if possible).

First-aid measures after inhalation : Remove to fresh air and keep at rest in a position comfortable for breathing. Obtain medical attention if breathing difficulty persists.

First-aid measures after skin contact : Rinse immediately with plenty of water for at least 15 minutes. Obtain medical attention if irritation develops or persists.

First-aid measures after eye contact : Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Obtain medical attention.

First-aid measures after ingestion : Do NOT induce vomiting. Rinse mouth. Immediately call a POISON CENTER or doctor.

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

Symptoms/injuries : Causes skin irritation.

Symptoms/injuries after inhalation : Overexposure may be irritating to the respiratory system.

Symptoms/injuries after skin contact : Causes skin irritation. Redness, pain, swelling, itching, burning, dryness, and dermatitis.

Cargille Immersion Oil Type A & B

Safety Data Sheet

According to Regulation (EC) No. 453/2010

- Symptoms/injuries after eye contact : Direct contact with the eyes is likely irritating.
Symptoms/injuries after ingestion : Ingestion is likely to be harmful or have adverse effects.
Chronic symptoms : None expected under normal conditions of use.

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

If you feel unwell, seek medical advice (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 : Do not use a heavy water stream. Use of heavy stream of water may spread fire. Application of water stream to hot product may cause frothing and increase fire intensity.

5.2. Special hazards arising from the substance or mixture

- Fire hazard : Not considered flammable but may burn at high temperatures.
Explosion hazard : Product is not explosive.
Reactivity : Hazardous reactions will not occur under normal conditions.

5.3. Advice for firefighters

- Precautionary measures fire : Exercise caution when fighting any chemical fire.
Firefighting instructions : Use water spray or fog for cooling exposed containers.
Protection during firefighting : Do not enter fire area without proper protective equipment, including respiratory protection.
Other information : Refer to Section 9 for flammability properties.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

- General measures : Avoid all contact with skin, eyes, or clothing. Avoid breathing (vapour, mist, spray).

6.1.1. For non-emergency personnel

- Protective equipment : Use appropriate personal protection equipment (PPE).
Emergency procedures : Evacuate unnecessary personnel.

6.1.2. For emergency responders

- Protective equipment : Equip cleanup crew with proper protection.
Emergency procedures : Stop leak if safe to do so. Eliminate ignition sources. Ventilate area.

6.2. Environmental precautions

Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

- For containment : Contain any spills with dikes or absorbents to prevent migration and entry into sewers or streams.
Methods for cleaning up : Clean up spills immediately and dispose of waste safely. Spills should be contained with mechanical barriers. Transfer spilled material to a suitable container for disposal.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection. For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

- Handling temperature : 18 - 32 °C (65 - 90 °F)
Hygiene measures : Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work.

7.2. Conditions for safe storage, including any incompatibilities

- Technical measures : Comply with applicable regulations.
Storage conditions : Store in a dry, cool and well-ventilated place. Keep container closed when not in use. Keep/Store away from direct sunlight, extremely high or low temperatures and incompatible materials.
Incompatible products : Strong acids. Strong bases. Strong oxidizers.

7.3. Specific end use(s)

For professional and R&D use only. Conditions of Intended Use: (ABBR. C.I.U.) As a Microscope Immersion Oil at normal room pressure 101,32 hPa (760 mm Hg), temperature 7°C to 40°C (45°F to 104°F) in a non misted / non airborne state in a room having

Cargille Immersion Oil Type A & B

Safety Data Sheet

According to Regulation (EC) No. 453/2010

normal air changes (2) / HR., in a trained and supervised laboratory / industrial setting using standard Good Laboratory/Good Manufacturing procedures.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure limits should not occur if Conditions Of Intended Use and sections 1, 7.3, and 8.2 are followed.

Proprietary Component		
USA ACGIH	ACGIH TWA (mg/m ³)	5 mg/m ³ (mist)
Terphenyls (26140-60-3)		
Austria	MAK (mg/m ³)	4,5 mg/m ³ (all isomers)
Austria	MAK (ppm)	0,5 ppm
Austria	MAK Short time value (mg/m ³)	4,5 mg/m ³ (all isomers)
Austria	MAK Short time value (ppm)	0,5 ppm (all isomers)
Croatia	KGVI (kratkotrajna granična vrijednost izloženosti) (mg/m ³)	4,8 mg/m ³
Croatia	KGVI (kratkotrajna granična vrijednost izloženosti) (ppm)	0,5 ppm
France	VLE (mg/m ³)	5 mg/m ³
France	VLE (ppm)	0,5 ppm
Greece	OEL TWA (mg/m ³)	5 mg/m ³
Greece	OEL TWA (ppm)	0,5 ppm
Greece	OEL STEL (mg/m ³)	5 mg/m ³
Greece	OEL STEL (ppm)	0,5 ppm
USA ACGIH	ACGIH Ceiling (mg/m ³)	5 mg/m ³
Spain	VLA-EC (mg/m ³)	5 mg/m ³
Spain	VLA-EC (ppm)	0,52 ppm
Switzerland	VME (mg/m ³)	5 mg/m ³
Switzerland	VME (ppm)	0,5 ppm
United Kingdom	WEL STEL (mg/m ³)	4,8 mg/m ³
United Kingdom	WEL STEL (ppm)	0,5 ppm
Denmark	Grænseværdie (langvarig) (mg/m ³)	5 mg/m ³
Denmark	Grænseværdie (langvarig) (ppm)	0,5 ppm
Finland	HTP-arvo (8h) (mg/m ³)	10 mg/m ³
Finland	HTP-arvo (8h) (ppm)	1 ppm
Finland	HTP-arvo (15 min)	29 mg/m ³
Finland	HTP-arvo (15 min) (ppm)	3 ppm
Ireland	OEL (15 min ref) (mg/m ³)	5 mg/m ³
Ireland	OEL (15 min ref) (ppm)	0,5 ppm
Norway	Gjennomsnittsverdier (Takverdi) (mg/m ³)	4,5 mg/m ³
Norway	Gjennomsnittsverdier (Takverdi) (ppm)	0,5 ppm
Slovenia	OEL TWA (mg/m ³)	5 mg/m ³ (inhalable fraction)
Portugal	OEL - Ceilings (mg/m ³)	5 mg/m ³
Proprietary Component		
Belgium	Limit value (mg/m ³)	5,0 mg/m ³
Belgium	Limit value (ppm)	0,5 ppm
USA ACGIH	ACGIH TWA (ppm)	0,5 ppm (non-irradiated)
Spain	VLA-ED (mg/m ³)	20 mg/m ³
Spain	VLA-ED (ppm)	2 ppm

Cargille Immersion Oil Type A & B

Safety Data Sheet

According to Regulation (EC) No. 453/2010

Proprietary Component		
Spain	VLA-EC (mg/m ³)	50 mg/m ³
Spain	VLA-EC (ppm)	5 ppm
Switzerland	VME (mg/m ³)	5 mg/m ³ (all isomers)
Switzerland	VME (ppm)	0,5 ppm (all isomers)
Denmark	Grænseværdie (langvarig) (mg/m ³)	4,4 mg/m ³
Denmark	Grænseværdie (langvarig) (ppm)	0,4 ppm
Ireland	OEL (8 hours ref) (mg/m ³)	4,9 mg/m ³
Ireland	OEL (8 hours ref) (ppm)	0,5 ppm
Ireland	OEL (15 min ref) (mg/m ³)	14,7 mg/m ³ (calculated)
Ireland	OEL (15 min ref) (ppm)	1,5 ppm (calculated)
Norway	Gjennomsnittsverdier (AN) (mg/m ³)	4,4 mg/m ³
Norway	Gjennomsnittsverdier (AN) (ppm)	0,4 ppm
Norway	Gjennomsnittsverdier (Korttidsverdi) (mg/m ³)	8,8 mg/m ³
Norway	Gjennomsnittsverdier (Korttidsverdi) (ppm)	1,2 ppm
Poland	NDS (mg/m ³)	12,5 mg/m ³
Portugal	OEL TWA (ppm)	0,5 ppm (non-irradiated)

8.2. Exposure controls

Appropriate engineering controls

: Ensure adequate ventilation, especially in confined areas. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure all national/local regulations are observed.

Personal protective equipment

: Protective goggles. Gloves. Protective clothing.



Materials for protective clothing

: Not required for normal conditions of use.

Hand protection

: protective gloves.

Eye protection

: In case of splash hazard: chemical goggles or safety glasses.

Skin and body protection

: Wear suitable protective clothing.

Respiratory protection

: If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn.

Environmental exposure controls

: Do not allow the product to be released into the environment.

Consumer exposure controls

: Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Liquid, oily
Colour	: Clear colourless to light yellow
Odour	: Slight
Odour threshold	: No data available
pH	: No data available
Evaporation rate, Mineral Oil = 1	: ca 1
Melting point	: 0 °C (32 °F)
Freezing point	: No data available
Boiling point	: ≈ 340 °C (≈ 644 °F) @ 101,32 hPa (760 mm Hg)
Flash point	: 163 °C (325,40 °F) (Open Cup)
Auto-ignition temperature	: No data available
Decomposition temperature	: No data available
Flammability (solid, gas)	: No data available
Vapour pressure	: < 13,33 pascals (< 0,1 mmHg)

Cargille Immersion Oil Type A & B

Safety Data Sheet

According to Regulation (EC) No. 453/2010

Relative vapour density at 20 °C, Air = 1	: ca = 1
Relative density, Water = 1	: 0,923 @ 25°C
Solubility, Water	: Nil
Partition coefficient: n-octanol/water	: No data available
Viscosity	: 150, 1250 cSt @ 23°C
Explosive properties	: Not explosive
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

Hazardous reactions will not occur under normal conditions.

10.2. Chemical stability

Stable under recommended handling and storage conditions (see section 7).

10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures. Ignition sources. Incompatible materials.

10.5. Incompatible materials

Strong oxidizers.

10.6. Hazardous decomposition products

Carbon oxides (CO, CO₂).

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

Proprietary Component	
LD50 oral rat	> 5000 mg/kg
Proprietary Component	
LD50 oral rat	> 2000 mg/kg
LD50 dermal rat	> 2000 mg/kg
LC50 inhalation rat (ppm)	> 4185 ppm/4h
Terphenyls (26140-60-3)	
LD50 dermal rabbit	> 12500 mg/kg
Proprietary Component	
LD50 oral rat	17500 mg/kg
LD50 dermal rabbit	6800 mg/kg

Skin corrosion/irritation	: Causes skin irritation.
Serious eye damage/irritation	: Not classified
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified
Reproductive toxicity	: Not classified
Specific target organ toxicity (single exposure)	: Not classified
Specific target organ toxicity (repeated exposure)	: Not classified
Aspiration hazard	: Not classified

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : Very toxic to aquatic life. Harmful to aquatic life with long lasting effects.

Proprietary Component	
LC50 fishes 1	> 10000 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus)

Cargille Immersion Oil Type A & B

Safety Data Sheet

According to Regulation (EC) No. 453/2010

Terphenyls (26140-60-3)	
LC50 fishes 1	> 0,11 mg/l (Exposure time: 96 h - Species: Oncorhynchus mykiss [static])
EC50 Daphnia 1	> 0,11 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC50 fish 2	> 0,11 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])
Proprietary Component	
LC50 fishes 1	> 0,53 mg/l (Exposure time: 96 h - Species: Pimephales promelas [static])
EC50 Daphnia 1	0,011 mg/l (Exposure time: 48 h - Species: Daphnia magna)
LC50 fish 2	> 0,53 mg/l (Exposure time: 96 h - Species: Lepomis macrochirus [static])

12.2. Persistence and degradability

No additional information available

12.3. Bioaccumulative potential

Proprietary Component	
Log Pow	> 6

12.4. Mobility in soil

No additional information available

12.5. Results of PBT and vPvB assessment

No additional information available

12.6. Other adverse effects

Other information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations : Dispose of waste material in accordance with all local, regional, national, and international regulations.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

14.1. UN number

Not regulated for transport

14.2. UN proper shipping name

Not applicable

14.3. Transport hazard class(es)

Not applicable

14.4. Packing group

Not applicable

14.5. Environmental hazards

Dangerous for the environment



Other information : No supplementary information available.

14.6. Special precautions for user

14.6.1. Overland transport

No additional information available

14.6.2. Transport by sea

No additional information available

14.6.3. Air transport

No additional information available

14.7. Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable

Cargille Immersion Oil Type A & B

Safety Data Sheet

According to Regulation (EC) No. 453/2010

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

15.1.1. EU-Regulations

The following restrictions are applicable according to Annex XVII of the REACH Regulation (EC) No 1907/2006:

3. Liquid substances or mixtures which are regarded as dangerous in accordance with Directive 1999/45/EC or are fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008	Cargille Immersion Oil Type A & B
3.b. Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard classes 3.1 to 3.6, 3.7 adverse effects on sexual function and fertility or on development, 3.8 effects other than narcotic effects, 3.9 and 3.10	Butene, homopolymer
3.c. Substances or mixtures fulfilling the criteria for any of the following hazard classes or categories set out in Annex I to Regulation (EC) No 1272/2008: Hazard class 4.1	Terphenyls

Contains no substance on the REACH candidate list

Contains no REACH Annex XIV substances

15.1.2. National regulations

No additional information available

15.2. Chemical safety assessment

No chemical safety assessment has been carried out.

SECTION 16: Other information

Revision date

: 15/07/2015

Data sources

: REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labelling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006

Full text of R-, H- and EUH-phrases:

Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1
Aquatic Chronic 3	Hazardous to the aquatic environment — Chronic Hazard, Category 3
Aquatic Chronic 4	Hazardous to the aquatic environment — Chronic Hazard, Category 4
Asp. Tox. 1	Aspiration hazard, Category 1
Skin Irrit. 2	Skin corrosion/irritation, Category 2
H304	May be fatal if swallowed and enters airways
H315	Causes skin irritation
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects
H412	Harmful to aquatic life with long lasting effects
H413	May cause long lasting harmful effects to aquatic life
R38	Irritating to skin
R50/53	Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment
R53	May cause long-term adverse effects in the aquatic environment
R65	Harmful: may cause lung damage if swallowed
N	Dangerous for the environment
Xi	Irritant
Xn	Harmful

Cargille Immersion Oil Type A & B

Safety Data Sheet

According to Regulation (EC) No. 453/2010

SDS EU (REACH Annex II) 10pt

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product. The information supplied is based on data available to us and is believed to be correct. However, no guarantee or warranty of any kind expressed or implied, is made with respect to this information presented and Cargille Laboratories assumes no responsibility for the result of the use of this product. This information is furnished upon the condition that the persons responsible for its use shall make their own determination of the suitability of the material for their particular purpose. Please note that we consider the English version to be the authoritative version for compliance and regulatory purposes.