OCT 1 4 1994

Material Safety Data Sheet
May be used to comply with
OSHA'S Hazard Communication Standard.
CFR 1910.1200. Standard must be
consulted for specific requirements.

12-368 A&B
12-369 A&B
12-370 A&B

Cargille
Services to the Sciences Since 1925

R. P. CARGILLE LABORATORIES, INC.
55 Commerce Road • Cedar Grove, New Jersey • 07009-1289 USA
Phone: 201-239-6633 Fax: 201-239-6096 Cable: CARLABSCI CEDARGROVENJ

Catalog #16482 - Type A; #16484 - Type B

IDENTITY (As Used on Label and Manuf. Literature)	Note. Blank spaces are not permitted. If any item is not applicable, or no information is available, the space must be marked to indicate that.
Cargille Immersion Oil Types A & B Code 1248	

Section 1

Manufacturer's Name	Emergency Telephone Number
R.P. Cargille Laboratories, Inc.	1-201-239-6633
Address (Number, Street, City, State, and ZIP Code)	Telephone Number for information: 1-201-239-6633
55 Commerce Rd.	Date Prepared: October 5, 1990 — Supercedes prior dated MSDS for this material
Cedar Grove, NJ 07009	Signature of Preparer (optional)

The information supplied is based on data available to us and is believed to be correct. However, no guarantee or warranty of kind expressed or implied, is made with respect to the information presented and Cargille Laboratories assumes no responsibilit for the results of the use of this product. This information is furnished upon the condition that the person responsible for i use shall make his or her own determination of the suitability of the material for his or her particular purpose.

Conditions of Intended and normal Use: (abbr. C.I.U.) As a Microscope Immersion Oil at normal room pressure (760mm Hg), temperature 39'F to 104'F in a non misted /non airborn 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

Section 2 - Hazardous Ingredients

Hazardous Components	(Common Name (s))	Specific Chemical Identity Information: OSHA PEL CEILING	ACGIH TLV T.W.A.	Other Limits Recommended	% (optional)
Trade Secret	Hydrogenated Terphenyl	N.E.	5mg/cubic meter *		
Trade Secret	Terphenyl	5mg/cubic meter *	5mg/cubic meter *		
Trade Secret	Natural Hydrocarbons	5mg/cubic meter *	5mg/cubic meter *	if misted	
Trade Secret	Polybutenes	5mg/cubic meter *	5mg/cubic meter *	if misted	

* PEL Ceilings & TLV T.W.A.'s if any should not occur if C.I.U. and Sections 7 & 8 followed.

NOTE: Product normally sold in 1/4 oz. to 1 gallon quantities. Used in single drop to a few cubic centimeters per application. See requisitioner for specific quantities involved.

Section 3 - Physical/Chemical Characteristics

Boiling Point at (760 mm Hg.)	340'C / 644'F	Specific Gravity (H2O = 1) Temp. 23'C/73'F	.9
Vapor Pressure in mm Hg. at (Temp.)	73'F / < 0.1	Melting Point	< 32'F
Vapor Density (AIR = 1) at (mm Hg. & Temp.)	760 73'F / ca 1	Evaporation Rate at (760 mm Hg. & 23'C/73'F (Mineral Oil = 1)	ca 1
Solubility in Water at (mm Hg. & Temp.)	760 73'F / Nil	Appearance and Odor	Light yellow, slight characteristic odor

Section 4 - Fire and Explosion Hazard Data

Flash Point (Cup Method Used)	Flammable Limits	LEL	UEL
> 325'F (163'C) C.O.C.		N.D.F.	N.D.F.

Extinguishing Media
Carbon dioxide, foam, dry chemical or any Class B agent

Special Fire Fighting Procedures
None

Unusual Fire and Explosion Hazards
None

Abbreviations: N.A. = Not Applicable; N.D.F. = No Data Found; Tr.S. = Trade Secret; N.E. = Not Established; C.I.U. = Conditions of Intended Use; < = less than; > = greater than.

Section 5 - Reactivity Data

Stability	Unstable		
	Stable	Yes	

Incompatibility (Materials and/or Conditions to Avoid)

Strong oxidizers, heat above 150'F

Hazardous Polymerization	May Occur		Conditions to Avoid
	Will Not Occur	X	None

Section 6 - Health Hazard Data

Route(s) of Entry:	Inhalation?	Skin?	Mucous Membranes/Eyes?	Ingestion?
(Not likely at C.I.U.)	Yes	Slight	Slight	Possible

Health Hazards (Acute and Chronic)

None known at C.I.U.

Carcinogenicity:	NTP?	IARC Monographs?	OSHA Carcinogen?
	No	No	No

Signs and Symptoms of Exposure

Oily feel, if liquid is misted or above 150'F (not a C.I.U.) headaches and nausea possible.

Medical Conditions Generally Aggravated by Exposure

N.D.E.

Emergency and First Aid Procedures: Include possible material that may have been mixed with liquid during use.

Inhalation - (Not likely at C.I.U.) If concern arises remove to fresh air

Skin & Clothes - Prompt soap and water wash

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

Ingestion - Low order of toxicity, First Aid normally not needed (consult physician)

Section 7 - Precautions for Safe Handling and Use - Follow C.I.U. See Section 1

Steps to Be Taken in Case Material is Released or Spilled

Absorb, place in plastic container, cap or twist tie closure

Waste Disposal Method:

All Chemical Disposal must be in accordance with current local, state, and federal regulations.

Treat as used instrument lubrication oil.

Precautions to Be Taken in Handling and Storing

Store between 65'F and 90'F (18'C and 32'C)

Other Precautions

Avoid: continual direct sunlight, vaporizing or atomizing

Section 8 - Control Measures; When used as intended (see section 1)

Respiratory Protection (Specify Type)

See 'Ventilation'

Ventilation	Local Exhaust	*	Special	None
	Mechanical (General)	*	Other	Normal Room Air Changes (2)/Hr.

Protective Gloves *	Eye Protection *
If worn, polyethylene gloves are recommended	

Other Protective Clothing or Equipment

N.A.

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

Special Precautions

N.A.