

Material Safety Data Sheet

NFPA	HMIS	Personal Protective Equipment						
	<table border="1" style="margin: auto;"> <tr> <td style="background-color: #00b0f0;">Health Hazard</td> <td style="text-align: center; border: 1px solid black;">1</td> </tr> <tr> <td style="background-color: #ff6666;">Fire Hazard</td> <td style="text-align: center; border: 1px solid black;">0</td> </tr> <tr> <td style="background-color: #ffff00;">Reactivity</td> <td style="text-align: center; border: 1px solid black;">0</td> </tr> </table>	Health Hazard	1	Fire Hazard	0	Reactivity	0	 See Section 15.
Health Hazard	1							
Fire Hazard	0							
Reactivity	0							

Section 1. Chemical Product and Company Identification		Page Number: 1
Common Name/Trade Name Perfluorodecalin	Catalog Number(s). P2310	
	CAS# 306-94-5	
Manufacturer SPECTRUM LABORATORY PRODUCTS INC. 14422 S. SAN PEDRO STREET GARDENA, CA 90248	RTECS QJ3175000	
Commercial Name(s) Not available.	TSCA TSCA 8(b) inventory: Perfluorodecalin	
Synonym Octadecafluorodecahydronaphthalene; Naphthalene, octadecafluorodecahydro-; Perfluorodecahydronaphthalene	CI# Not available.	
Chemical Name Naphthalene, decahydrooctadecafluoro-	IN CASE OF EMERGENCY CHEMTREC (24hr) 800-424-9300 CALL (310) 516-8000	
Chemical Family Not available.		
Chemical Formula C10-F18		
Supplier SPECTRUM LABORATORY PRODUCTS INC. 14422 S. SAN PEDRO STREET GARDENA, CA 90248		

Section 2. Composition and Information on Ingredients					
Name	CAS #	Exposure Limits			% by Weight
		TWA (mg/m ³)	STEL (mg/m ³)	CEIL (mg/m ³)	
1) Perfluorodecalin	306-94-5				100
Toxicological Data on Ingredients Not applicable.					

Section 3. Hazards Identification	
Potential Acute Health Effects	Slightly hazardous in case of skin contact (irritant, permeator), of eye contact (irritant), of ingestion, of inhalation.
Potential Chronic Health Effects	CARCINOGENIC EFFECTS: Not available. MUTAGENIC EFFECTS: Not available. TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Not available. Repeated or prolonged exposure is not known to aggravate medical condition.

Section 4. First Aid Measures

Eye Contact	Check for and remove any contact lenses. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Get medical attention if irritation occurs.
Skin Contact	Wash with soap and water. Cover the irritated skin with an emollient. Get medical attention if irritation develops.
Serious Skin Contact	Not available.
Inhalation	If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.
Serious Inhalation	Not available.
Ingestion	Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.
Serious Ingestion	Not available.

Section 5. Fire and Explosion Data

Flammability of the Product	Non-flammable.
Auto-Ignition Temperature	Not applicable.
Flash Points	Not applicable.
Flammable Limits	Not applicable.
Products of Combustion	Not available.
Fire Hazards in Presence of Various Substances	Not applicable.
Explosion Hazards in Presence of Various Substances	Risks of explosion of the product in presence of mechanical impact: Not available. Risks of explosion of the product in presence of static discharge: Not available.
Fire Fighting Media and Instructions	Not applicable.
Special Remarks on Fire Hazards	Avoid contact of vapour or liquid with red-hot surfaces, flames, or electrical arcs as this may give rise to toxic gases such as Hydrogen Fluoride. When heated to decomposition it emits toxic fumes of Hydrogen Fluoride
Special Remarks on Explosion Hazards	Not available.

Section 6. Accidental Release Measures

Small Spill	Absorb with an inert material and put the spilled material in an appropriate waste disposal.
Large Spill	Absorb with an inert material and put the spilled material in an appropriate waste disposal. Finish cleaning by spreading water on the contaminated surface and allow to evacuate through the sanitary system.

Section 7. Handling and Storage

Precautions	Do not breathe gas/fumes/ vapor/spray. Keep away from incompatibles such as oxidizing agents, metals.
Storage	Keep container tightly closed. Keep container in a cool, well-ventilated area.

Section 8. Exposure Controls/Personal Protection

Engineering Controls	Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of vapors below their respective threshold limit value.
Personal Protection	Safety glasses. Lab coat.
Personal Protection in Case of a Large Spill	Splash goggles. Full suit. Boots. Gloves. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.
Exposure Limits	Not available.

Section 9. Physical and Chemical Properties

Physical state and appearance	Liquid.	Odor	Odorless.
Molecular Weight	462.08 g/mole	Taste	Not available.
pH (1% soln/water)	Not applicable.	Color	Clear Colorless.
Boiling Point	141°C (285.8°F) - 143 C.		
Melting Point	-10°C (14°F)		
Critical Temperature	Not available.		
Specific Gravity	1.908 - 1.917(Water = 1)		
Vapor Pressure	Not available.		
Vapor Density	15.93 - 17.5 (Air = 1)		
Volatility	Not available.		
Odor Threshold	Not available.		
Water/Oil Dist. Coeff.	Not available.		
Ionicity (in Water)	Not available.		
Dispersion Properties	Not available.		
Solubility	Insoluble in cold water, hot water. Miscible with chlorofluorocarbons (CFC's). Sparingly soluble in most common solvents		

Section 10. Stability and Reactivity Data

Stability	The product is stable.
Instability Temperature	Not available.
Conditions of Instability	Incompatible materials
Incompatibility with various substances	Reactive with oxidizing agents, metals.
Corrosivity	Not available.

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Special Remarks on Reactivity	Incompatible with Lithium, Sodium, Potassium, Calcium, and Barium. Do not use sodium or similar metals or their hydrides for removing water from the liquid; other desiccants are acceptable.
Special Remarks on Corrosivity	Not available.
Polymerization	Will not occur.

Section 11. Toxicological Information

Routes of Entry	Absorbed through skin. Eye contact. Inhalation. Ingestion.
Toxicity to Animals	LD50: Not available. LC50: Not available.
Chronic Effects on Humans	Not available.
Other Toxic Effects on Humans	Slightly hazardous in case of skin contact (irritant, permeator), of ingestion, of inhalation.
Special Remarks on Toxicity to Animals	Lethal Dose/Conc: LD [Rat] - Route: Oral; Dose: >100 ml/kg LC[Rat] - Route: Inhalation; Dose: >8647 ppm/1H
Special Remarks on Chronic Effects on Humans	Not available.
Special Remarks on other Toxic Effects on Humans	Acute Potential Health Effects Skin: It may cause skin irritation. Eyes: It may cause eye irritation. Inhalation: It may cause respiratory tract irritation Ingestion: no information available Chronic Potential Health Effects Eyes: Prolonged eye contact (or residual amounts that remain in eyes for a prolonged period) may cause chemical conjunctivitis and affect the retinal pigment epithelium and the corneal endothelium.

Section 12. Ecological Information

Ecotoxicity	Not available.
BOD5 and COD	Not available.
Products of Biodegradation	Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.
Toxicity of the Products of Biodegradation	The product itself and its products of degradation are not toxic.
Special Remarks on the Products of Biodegradation	Not available.

Section 13. Disposal Considerations

Waste Disposal	Waste must be disposed of in accordance with federal, state and local environmental control regulations.
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Section 14. Transport Information

DOT Classification Not a DOT controlled material (United States).

Identification Not applicable.

Special Provisions for Transport Not applicable.

DOT (Pictograms)



Section 15. Other Regulatory Information and Pictograms

Federal and State Regulations TSCA 8(b) inventory: Perfluorodecalin

California Proposition 65 Warnings California prop. 65: This product contains the following ingredients for which the State of California has found to cause cancer which would require a warning under the statute: No products were found.
California prop. 65: This product contains the following ingredients for which the State of California has found to cause birth defects which would require a warning under the statute: No products were found.

Other Regulations EINECS: This product is on the European Inventory of Existing Commercial Chemical Substances (EINECS No. 206-192-4).
Canada: Listed on Canadian Non-Domestic Substance List (NDSL).
China: Not listed on National Inventory.
Japan: Listed on National Inventory (ENCS).
Korea: Not listed on National Inventory (KECI).
Philippines: Not listed on National Inventory (PICCS).
Australia: Not listed on AICS.

Other Classifications **WHMIS (Canada)** Not controlled under WHMIS (Canada).

DSCL (EEC) This product is not classified according to the EU regulations. S41- In case of fire and/or explosion do not breathe fumes.

HMS (U.S.A.)

Health Hazard	1
Fire Hazard	0
Reactivity	0
Personal Protection	a

National Fire Protection Association (U.S.A.)

Health  Flammability
Reactivity
Specific hazard

WHMIS (Canada) (Pictograms)



DSCL (Europe) (Pictograms)



TDG (Canada) (Pictograms)



ADR (Europe)
(Pictograms)

Protective Equipment



Not applicable.
Lab coat.



Not applicable.
Safety glasses. Gloves.



Section 16. Other Information

MSDS Code 3490P

References Not available.

Other Special Considerations Not available.

Validated by Sonia Owen on 6/24/2009.

Verified by Sonia Owen.
Printed 6/24/2009.

CALL (310) 516-8000

Notice to Reader

All chemicals may pose unknown hazards and should be used with caution. This Material Safety Data Sheet (MSDS) applies only to the material as packaged. If this product is combined with other materials, deteriorates, or becomes contaminated, it may pose hazards not mentioned in this MSDS. It shall be the user's responsibility to develop proper methods of handling and personal protection based on the actual conditions of use. While this MSDS is based on technical data judged to be reliable, Spectrum Quality Products, Inc. assumes no responsibility for the completeness or accuracy of the information contained herein.