

AVATAR CORPORATION		Date:	04/30/10
		Revision:	01
Document #: MSDS-XXXXXX		Supersedes:	New
		Page	Page 1 of 4
Title:	Material Safety Data Sheet - AVATECH 110		
Document Owner:	J.P. Roush	Approved by:	

## 1. PRODUCT AND COMPANY IDENTIFICATION

### Avatech™ 110 Technical Grade Mineral Oil

Chemical Family: Petroleum Hydrocarbon Oil  
 Synonyms: Liquid Paraffin; White Mineral Oil; Liquid Petrolatum  
 Molecular Formula:  $\text{CH}_3[\text{CH}_2]_n\text{CH}_3$

Manufacturer: Avatar Corporation  
 500 Central Avenue  
 University Park, IL 60484  
 (708) 534-5511

Transportation emergency contact: Chem Tel (800) 255-3924

*Part Numbers*  
 42517      84528  
 46789  
 76300-104  
 76300-106  
 78917-160  
 78917-705

## 2. COMPOSITION / INFORMATION ON INGREDIENTS

Component	CAS #	Range by Wt.
Mineral Oil, Technical	8042-47-5	100%

(See Section 8, "Exposure Controls/Personal Protection", for exposure guidelines).

## 3. HAZARDS IDENTIFICATION

NFPA Code: Health-0, Flammability-1, Reactivity-0

HMIS Code: Health-0, Flammability-1, Reactivity-0

Emergency Overview: This product has been evaluated and does not require any hazard warning on the label under OSHA criteria.

### Potential Health Effects:

Eye Contact: Slightly hazardous (irritant).

Skin Contact: Non-irritant.

Ingestion: Negligible effect; may act as a laxative.

Inhalation: No significant health hazards identified.

## 4. FIRST AID MEASURES

**Eye:** Flush immediately with large amounts of water and continue flushing for 15 minutes. If material is hot, treat for thermal burns and call a physician immediately.

**Skin:** Remove contaminated clothing. If material is hot, submerge injured area in cold water. Skin irritation or an allergic reaction may occur.

**Ingestion:** DO NOT induce vomiting. If victim is conscious, give 1 to 3 glasses of water or milk and contact physician or poison control center. Material may act as a laxative.

**Inhalation:** Remove to fresh air. If unconscious, seek medical attention.

## 5. FIRE FIGHTING MEASURES

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		Page	Page 2 of 4
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Flash point: 350 °F minimum  
Method used: Cleveland Open Cup  
Flammable limits:  
LEL (% vol. in air): 0.9%  
UEL (% vol. in air): 7.0%  
Autoignition temperature: Not determined.  
Flammability classification: Slight hazard. Material must be preheated before ignition will occur (OSHA Class IIIB).  
Extinguishing media: Agents approved for Class B hazards (e.g., dry chemical, carbon dioxide, foam, steam) or water fog. Do not use streams of water as this will scatter the liquid and spread the fire. A water spray may be used to keep fire-exposed containers and surroundings cool.  
Unusual fire and explosion hazards: May create dense smoke during combustion. Mild fire hazard when heated above its flash point.  
Firefighting equipment: Firefighters should wear full bunker gear, including a positive pressure self-contained breathing apparatus.  
Hazardous combustion products: Incomplete burning can produce carbon monoxide and/or carbon dioxide and other toxic gases.

## 6. ACCIDENTAL RELEASE MEASURES

Remove mechanically or contain on an absorbent material such as dry sand or earth. Remove all sources of ignition. Dike around spilled material.

## 7. HANDLING AND STORAGE

Handling: Safety glasses and protective clothing (i.e. lab coat) are required.  
Storage: Store in a cool, well-ventilated area in sealed containers. Do not store in open or unlabelled containers. Store away from strong oxidizing agents or combustible material.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Eye: Safety glasses are required.  
Skin: Protective clothing is required.  
Inhalation: Avoid breathing mist. If ventilation is inadequate, use a NIOSH/MSHA certified respirator that will protect against dust/mist.  
Engineering controls: Control airborne concentrations below the exposure guidelines. Ensure that eyewash stations and safety showers are proximal to the work station location.  
Exposure guidelines:  
Limits:  
OSHA PEL: 5 mg/m<sup>3</sup> (oil mist) (1989) (1971)  
ACGIH TLV-TWA: 5 mg/m<sup>3</sup> (oil mist)  
ACGIH TLV-STEL: 10 mg/m<sup>3</sup> (oil mist)

## 9. CHEMICAL AND PHYSICAL PROPERTIES

Appearance and odor: Colorless, oily liquid. Odorless.  
Vapor pressure: < 1.0 mmHg @ 20°C (68°F)  
Vapor density (Air=1): >1

AVATAR CORPORATION		Date:	04/30/10
		Revision:	01
Document #: MSDS-XXXXXX		Supersedes:	New
		Page	Page 3 of 4
Title:	Material Safety Data Sheet – AVATECH 110		
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Boiling point: Not determined.  
Melting point: Not determined.  
Solubility: Negligible in water (below 0.1%); soluble in hydrocarbons.  
Specific gravity: 0.8180 - 0.8800 @ 25°C (77°F)

## 10. STABILITY AND REACTIVITY

Stability: Stable.  
Conditions to avoid: Avoid excessive heat and open flames.  
Materials to avoid: Avoid chlorine, fluorine, and other strong oxidizers.  
Hazardous decomposition: None identified.  
Hazardous polymerization: Will not occur.

## 11. TOXICOLOGICAL INFORMATION

Routes of entry: ~~Absorbed through skin and eye contact~~

### Acute toxicity data:

Eye irritation: Testing not conducted. See Other Toxicity Data.  
Skin irritation: Testing not conducted. See Other Toxicity Data.  
Dermal LD<sub>50</sub>: Testing not conducted. See Other Toxicity Data.  
Oral LD<sub>50</sub>: Testing not conducted. See Other Toxicity Data.  
Inhalation LC<sub>50</sub>: Testing not conducted. See Other Toxicity Data.

### Other toxicity data:

Specific toxicity tests have not been conducted on this product. Our hazard evaluation is based on information from similar products, the ingredients, technical literature, and/or professional experience. A similar product produced a primary eye irritation score (PEIS) of less than 10/110.0 (rabbits), a primary skin irritation score (PDIS) of less than 4.0/8.0 (rabbits), a dermal LD<sub>50</sub> greater than 2000 mg/kg (rabbits), and an oral LD<sub>50</sub> score greater than 5000 mg/kg (rats). Also, a similar product was not a skin sensitizer when tested.  
Oil mist: Repeated exposure to levels of oil mists in excess of the exposure limits may result in accumulation of oil droplets in pulmonary tissue and may lead to irritation of the nose and throat. No adverse health effect is expected to occur at or below the exposure limits.  
No component of this product present at levels greater than 0.1% is identified as a carcinogen by the U.S. National Toxicology Program, the U.S. Occupational Safety and Health Act, or the International Agency on Research on Cancer (IARC).

## 12. ECOLOGICAL INFORMATION

### Products of Biodegradation:

Hazardous short term degradation products are not likely to occur. However, long term degradation products may arise.

## 13. DISPOSAL INFORMATION

Disposal must be in accordance with applicable federal, state, or local regulations.

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		Page	Page 4 of 4
Title:	Material Safety Data Sheet – AVATECH 110		
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#### 14. TRANSPORTATION INFORMATION

U.S. Department of Transportation: Not regulated.  
International Information:  
Canadian Transportation of Dangerous Goods: Not regulated.

#### 15. REGULATORY INFORMATION

CERCLA Sections 102A/103 Hazardous Substances (40 CFR Part 302.4): Not reportable.  
SARA Title III Section 302 Extremely Hazardous Substances (40 CFR Part 355): Not regulated.  
SARA Title III Sections 311/312 Hazardous Categorization (40 CFR Part 370): Not regulated.  
SARA Title III Section 313 (40 CFR Part 372): Not regulated.  
U.S. Inventory (TSCA): Listed on inventory. All components comply with TSCA.  
OSHA Hazard Communication Standard: Listed by ACGIH. Listed by OSHA.

##### FOOD CONTACT STATUS:

FDA: This product is approved for use by the FDA under the following sections of 21 CFR:  
-Part 178.3620 as a component of nonfood articles in contact with food when used in accordance with the specifications of this subpart.  
-Part 573.680 in animal feed, subject to the provisions of this subpart.  
USDA: H1 Status: This product is acceptable to the USDA as a lubricant with incidental food contact for use in official meat and poultry establishments.

#### 16. OTHER INFORMATION

This material safety data sheet and the information it contains is offered to you in good faith as accurate. We have reviewed any information contained in this data sheet which we received from sources outside our company. We believe that information to be correct but cannot guarantee its accuracy or completeness. Health and safety precautions in this data sheet may not be adequate for all individuals and/or situations. It is the user's obligation to evaluate and use this product safely and to comply with all applicable laws and regulations. No statement made in this data sheet shall be construed as a permission or recommendation for the use of any product in a manner that might infringe existing patents. No warranty is given, either expressed or implied.

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