



# SAFETY DATA SHEET

## OLEO RESIN MEDIUM

### 1. Identification of the Preparation and of The Company

Product Name and/or code: OLEO RESIN MEDIUM  
 PM 5  
 100 ML, 250 ML, 1 L

Effective Date: 29-Jul-22

Manufacturer: Michael Harding Art Formulas Ltd  
 Unit K Springvale Industrial Estate  
 Cwmbran, UK NP44 5BE

Website Address: www.michaelharding.co.uk

Information Contact: North America: 978-376-2497  
 UK/Europe: 44 (0) 1633 - 484-700

Emergency Contact (Health) : For health emergencies call the Poison Control Center: 1-800-222-1222

Product Use: **ART MATERIAL - CONSUMER PRODUCT.** Artist professional medium. For application to a substrate. Not intended for spray application, sanding, or other operations which generate dust or airborne concentrations.

### 2. Hazards Identification

#### Emergency Overview

**FLAMMABLE LIQUID AND VAPOR. HARMFUL IF SWALLOWED. CAUSES EYE AND SKIN IRRITATION.**

Classification of the Product:

Label Elements

Conforms to ASTM D-4236 (USA)

GHS Hazard Pictograms



GHS Signal Word

**WARNING!**

GHS Hazard Statement

Flammable liquids, Category 3	H226: Flammable liquid and vapor.
Acute Toxicity Oral, Category 4	H302: Harmful if swallowed.
Acute Toxicity Inhalation, Category 4	H332: Harmful if inhaled.
Acute Toxicity Dermal, Category 4	H312: Harmful in contact with skin.
Aspiration toxicant, Category 1	H304: May be fatal if swallowed and enters airways.
Skin Irritation (mild), Category 3	H316: Causes mild skin irritation.
Eye Irritation, Category 2A	H319: Causes serious eye irritation
Aquatic (Acute) Category 2	H401: Toxic to aquatic life.
Aquatic (Chronic) Category 2	H411: Toxic to aquatic life with long lasting effects.



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#### GHS Precautionary Statements

P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking. P233 Keep container tightly closed. P280 Wear protective gloves/ eye protection/ face protection. P240 Ground/bond container and receiving equipment. P241 Use explosion-proof electrical/ ventilating/ lighting/ equipment. P242 Use only non-sparking tools. P243 Take precautionary measures against static discharge. P261 Avoid breathing dust/ fume/ gas/ mist/ vapors/ spray. P264 + p265 Wash skin thoroughly after handling. Do not touch eyes. P270 Do not eat, drink or smoke when using this product. P271 Use only outdoors or in a well-ventilated area. P272 Contaminated work clothing must not be allowed out of the workplace. P273 Avoid release to the environment. P280 Wear protective gloves/ eye protection/ face protection.

P301 + P310 IF SWALLOWED: Immediately call a POISON CENTER/ doctor. P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower. P304 + P340 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P331 Do NOT induce vomiting. P333 + P313 If skin irritation or rash occurs: Get medical advice/ attention. P337 + P313 If eye irritation persists: Get medical advice/ attention. P362 Take off contaminated clothing and wash before reuse. P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam to extinguish. P391 Collect spillage.

P403 + P235 Store in a well-ventilated place. Keep cool. P405 Store locked up. P501 Dispose of contents/ container to an approved waste disposal plant.

#### Art Material - Consumer Product Label

##### Hazard Statement

**May be fatal if swallowed. VAPOR HARMFUL.** Inhalation of vapors may affect the brain, nervous system, respiratory system, causing dizziness, headache, nausea or respiratory irritation. **MAY CAUSE ALLERGIC SKIN REACTION.** NOTICE: Reports have associated repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. **Intentional misuse by deliberately concentrating and inhaling the contents may be harmful or fatal.**



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Precaution Statement:

Keep away from heat, sparks and flame. **To avoid spontaneous combustion during temporary storage, soak soiled rags and waste immediately after use in a water-filled, closed metal container.** Vapors may cause flash fire. **Use only with adequate ventilation** and provide fresh air cross-ventilation. Avoid breathing vapors. Use a NIOSH approved properly fitted respirator. Do not eat, drink or smoke when using. **Avoid eye and skin contact.** Wash thoroughly after handling. Pregnant women should avoid exposure to solvents.

Children's Statement

**KEEP OUT OF THE REACH OF CHILDREN.**

NFPA

Health: 2  
Flammability: 3  
Reactivity : 0

HMIS

Health : 2\*  
Flammability: 2  
Physical Hazard: 1

This product should not be used for any other purpose than the intended use.

### 3. Composition/Information on Ingredients:

Substances:

Mixture of the following chemicals: Gum Turpentine (CAS 8006-64-2) < 51%  
Linseed Stand Oil (CAS 67746-08-1) < 23%  
Balsam Fir (CAS 8007-47-4) < 17%

*The remainder of the formulation is composed of proprietary non-hazardous ingredients.*

### 4. First Aid Measures

**Show this Safety Data Sheet to the doctor in attendance.** Symptoms of poisoning may appear several hours later. Do not leave person unattended. Move out of dangerous area.

Inhalation	If you experience difficulty in breathing, leave the area to obtain fresh air. Contact a physician immediately. If unconscious, place in recovery position and contact medical attention immediately.
Skin Contact	In case of skin contact, remove contaminated clothing and shoes immediately. Wash thoroughly with soap and plenty of water. Contact a physician immediately if irritation occurs.
Eye Contact	In case of eye contact, flush thoroughly with plenty of water for 15 minutes. Contact a physician immediately if irritation occurs. Continue rinsing eyes during transport to a medical facility.
Ingestion	If swallowed, <b>do not induce vomiting.</b> Rinse mouth. <b>Contact a physician immediately.</b>

**NOTE TO PHYSICIAN:** If ingested, material may be aspirated into the lungs and cause chemical pneumonitis. Treat appropriately.

### 5. Firefighting Measures

Extinguishing Media Water fog, foam, carbon dioxide or dry chemical equipment.



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Fire/Explosion Hazards

Flammable liquid and vapor. Hazardous decomposition products due to incomplete combustion.

Flashpoint/Flammability

81 ° F Flammable

Fire-fighting Procedures

Fire-Fighters should wear appropriate protective equipment and self-contained breathing apparatus with a full face-piece operated in positive pressure mode. Containers may explode when heated. Do not allow run-off from fire fighting to enter drains or water courses.

#### 6. Accidental Release Measures

Methods and Materials for Containment and Cleaning up

Ensure adequate ventilation. Spills may produce slippery conditions. Contain spill. Recover as much as possible. Absorb remainder with non-combustible material, vermiculite or other inert material. Place into closed container and store in a safe location to await disposal. Wash the spill area with soap and water. Dispose of saturated absorbent or cleaning materials appropriately, since spontaneous heating may occur.

#### 7. Handling and Storage

Safe Handling

Prevent static build-up and discharge. Keep away from possible sources of ignition. Use under ventilated conditions. Avoid eye and skin contact. For personal protection, we recommend that employees wash thoroughly after handling product. Always wash before eating, smoking or using toilet facilities. Keep container closed when not in use. Keep container upright to prevent leakage. Do not smoke while handling this product.

Environmental precautions

No product should be released to the environment. Keep container closed when not in use. Keep container upright to prevent leakage. If the product contaminates rivers and lakes or drains inform respective authorities. Keep away from drains.

Storage

Avoid fire, flames and strong oxidizers. Handle with care. Avoid formation of aerosol. Keep in a well ventilated area. Observe label precautions. Store in a cool place. Keep in a sealed container. Dispose of saturated absorbent or cleaning materials appropriately, since spontaneous heating may occur. **To avoid spontaneous combustion during temporary storage, soak soiled rags and waste immediately after use in a water-filled, closed metal container.**

#### 8. Exposure Controls/Personal Protection

Personal Protective Equipment

Wear tightly fitting safety goggles where spills, splashing or mist may occur. Wear water resistant impervious gloves if handling bulk amounts. Use respirators and components tested and approved under government standards such as NIOSH (USA).

Exposure Limits (USA)

Not determined for this mixture



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The values listed below are based on published literature values for the pure components.

Substance	OSHA PEL	NIOSH REL	ACGIH TLV
	8 hr TWA	Up to 10-hour TWA	8-hour TWA
<i>(ST) STEL (c) Ceiling (IHL) Inhalable</i>			
Gum Turpentine	100 ppm (560 mg/m <sup>3</sup> )	100 ppm (560 mg/m <sup>3</sup> )	20 ppm [2001]

Respiratory and Ventilation      Wear approved NIOSH/MSHA respirator if exposure to mist or vapor exceed applicable PEL/TLV limits. Use in accordance with manufacturer's use limitations and OSHA STANDARD 1910-34. Local ventilation may be used to prevent routine inhalation.

Skin Protection      Wear water resistant impervious gloves if handling bulk amounts.

Eye Protection      Wear goggles where spills or splashing may occur.

### 9. Physical and Chemical Properties

Appearance      Liquid

Physical State      Liquid

Color      Clear

Odor      Turpentine

State (pH)      Not applicable

Specific Gravity      Not determined for the mixture.

Viscosity      5,000 - 5,500 mPas

Flashpoint      81 ° F

Melting point / freezing point:      Not determined for the mixture. (*Turpentine: -55 °C*)

Boiling Point (range)      Not determined for the mixture. (*Turpentine: initial: 156 °C (ASTM D 233-13); 94% max. 170 °C (ASTM D 233-13)*)

Evaporation Rate      Not determined for the mixture. (*Turpentine: <1 (Butyl acetate=1)*)

Upper Explosion Limit      Not determined for the mixture. (*Turpentine: 6% volume*)

Lower Explosion Limit      Not determined for the mixture. (*Turpentine: 0.8% volume*)

Auto Ignition Temperature      Not determined for the mixture. (*Turpentine: >250 °C*)

Relative Density      Not determined for the mixture. (*Turpentine: 0.855-0.868 g/cm<sup>3</sup> ASTM D 233-11 at 25 °C*)

Relative Vapor Density      Not determined for the mixture.

Density      Not determined for the mixture.

Vapor Pressure      Not determined for the mixture. (*Turpentine: 504 Pa at 20 °C, 3,623 Pa at 50°C*)

Solubility in water      Not determined for the mixture. (*Turpentine: < 0.1%*)

### 10. Stability and Reactivity

Reactivity:      No dangerous reaction known under conditions of normal use. Refer to Section 5 through 8.

Chemical Stability      Stable under recommended storage conditions.

Conditions to Avoid      Avoid all sources of ignition (Heat, sparks and flames).

Incompatible materials      Keep away from sources of ignition. Incompatible with strong oxidizing agents.



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Hazardous Decomposition Products

Hazardous decomposition products due to incomplete combustion. Carbon Oxide. Smoke. Decomposition products depend on conditions.

**11. Toxicological Information**

*Studies have not been performed on this particular mixture.*

**When used and handled according to specifications, the product is not expected to have any harmful effects.**

Health Effects Harmful if swallowed. Causes eye and skin irritation.

*The toxicity values listed below are based on published literature values for the pure components.*

**Gum Turpentine**

Acute Toxicity (oral) LD50 (Rat) > 3,200 mg/kg

Acute Toxicity (dermal) LD50 (Rabbit) > 2,000 mg/kg

Acute Toxicity (inhalation) 13.5 mg/liter

**Linseed Stand Oil**

Acute Toxicity (oral) LD50 (Rat) > 4,897 mg/kg

Acute Toxicity (dermal) LD50 (Rat) > 2,000 mg/kg

Acute Toxicity (inhalation) No data available.

**Balsam Fir**

Acute Toxicity (oral) LD50 (Rat) > 5,000 mg/kg

Acute Toxicity (dermal) LD50 (Rabbit) > 5,000 mg/kg

Acute Toxicity Harmful if swallowed. Aspiration hazard. MAY BE FATAL IF ENTERS AIR WAYS.

Eye Effects Causes eye irritation.

Skin Effects Causes skin irritation.

Inhalation May be harmful if inhaled. Overexposure may affect the brain or nervous system causing dizziness, headache or nausea. May cause throat irritation.

**NOTICE: REPORTS HAVE ASSOCIATED REPEATED AND PROLONGED OCCUPATIONAL OVEREXPOSURE TO SOLVENTS WITH PERMANENT BRAIN AND NERVOUS SYSTEM DAMAGE. INTENTIONAL MISUSE BY DELIBERATELY CONCENTRATING AND INHALING THE CONTENTS MAY BE HARMFUL OR FATAL.**

Sensitization No effects are likely to occur during the foreseeable and reasonable use of the product.

Ingestion If ingested, material may be aspirated into the lungs.

Chronic Effects None known for the usual and ordinary uses of this product. If ingested, material may be aspirated into the lungs. Aspiration hazard. MAY BE FATAL ENTERS AIR WAYS.

Additional toxicological information: When used and handled according to specifications, the product is not expected to have any harmful effects according to past experience and the information provided.

NTP Not applicable to product.

IARC Not applicable to product.



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ACGIH

Not applicable to product.

OSHA

Not applicable to product.

### 12. Ecological Information

**Toxicity:** No product should be released to the environment. It is not expected to have significant environmental effects when used and disposed as directed.

**Aquatic toxicity** Studies have not been performed on this particular mixture.

*The toxicity information listed below are based on published literature values for the pure components.*

#### **Gum Turpentine**

**Aquatic toxicity** Classified as toxic to aquatic organisms and may cause long term adverse effects in the aquatic environment.

**Fish toxicity:** LC-0: 26 mg/l;  
LC-50: 33 mg/l;  
LC-100: 43 mg/l

**Daphnia toxicity:** 10-100mg/l (WAF) 24/48 hour

**Algae toxicity:** >100mg/l (WAF) 72 hour Eb/ErC50

**Persistence and degradability** Complete in 28 days.  
OECD 301E - readily biodegradable material modified screening test.

OECD 302C - inherent biodegradability modified MITI test (no. 2).

#### **Linseed Stand Oil**

**Fish toxicity:** LC50 (Brachydanio rerio (zebrafish)): 1,000 mg/L  
Exposure time: 96 h

**Daphnia toxicity:** EL50 > 100 mg/L  
Exposure time: 48 h

**Algae toxicity:** EL50 (Pseudokirchneriella subcapitata (green algae)): > 100 mg/L  
Exposure time: 72 h

**Persistence and degradability** Not readily biodegradable

**Bioaccumulate potential** No data available.

**Mobility in soil** No data available.

**Additional ecological information** As a general rule, no product should be released to the environment. The product should not be allowed to enter drains, water courses, or be deposited where it can affect ground or surface water.

### 13. Disposal Considerations

Dispose of all waste material in accordance with all applicable federal, state and local regulations. Handle with care. Do not dispose of waste into sewer.

### 14. Transport Information

#### **LAND DOT**

**Proper Shipping Name** Turpentine

**Hazard Class & Division** 3

**UN Number** 1299





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IMCO No. 3133

Packaging Group

111

**IMDG**

Proper Shipping Name

Turpentine

Transport Hazard Class

3

Packaging Group

III

EmS Codes

F-E, S-E

**ICAO/IATA**

Proper Shipping Name

Turpentine

Transport Hazard Class

3

Packaging Group

III

*This information is not intended to convey all specific regulatory or operational requirements/information relating to this product. It is the responsibility of the transporting organization to follow all applicable laws, regulations and rules relating to the transportation of the materials.*

**15. Regulatory Information**

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

SARA

Fire Hazard , Acute Health Hazard

Section 313 (specific toxic chemical listing)

Not applicable to this mixture.

TSCA (Toxic Substance Control Act)

All ingredients are listed.

**California Proposition 65**

As of July 29, 2022 this product contains no listed substances known to the State of California to cause cancer, birth defects or other reproductive harm, at concentrations which would require a warning under the statute.

Carcinogenicity categories

Not applicable to this mixture.

EPA (Environmental Protection Agency)

Not applicable to this mixture.

TLV (Threshold Limit Value established by ACGIH)

Not applicable to this mixture. Refer to Section 8.

NIOSH (National Institute for Occupational Safety & Health)

Not applicable to this mixture.

OSHA (Occupational Safety & Health Administration)

Not applicable to this mixture.

**16. Other Information**

Reason for Issue:

New GHS SDS

Prepared by:

ENVIRONMENTAL MEDICINE, INC.

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The information contained in this Safety Data Sheet was compiled using the latest and most reliable information available to the preparer from the manufacturer. The information is provided without any warranty, express or implied regarding its correctness or accuracy nor will the manufacturer assume any liability for any loss or damage arising out of the use of this information including without limitation direct or indirect losses or expenses. To the extent permitted by law, no warranty expressed or implied regarding the product described herein shall be created by or inferred from any state or omission for this SDS. It is solely the responsibility of the user to determine safe conditions for use of this product and to assume liability for any loss, damage or expense whatsoever arising out of the product's improper use.

#### ***Abbreviations and acronyms:***

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##### **NFPA (SCALE 0-4) National Fire**

##### **Protection Association (USA)**

Health:

**2 Warning:** May be harmful if inhaled or absorbed.

Fire:

**3 Warning:** Flammable liquid flash point below 100°F

Reactivity:

**0 Stable:** Not reactive when mixed with water.

##### **HMIS (SCALE 0-4) Hazardous Materials**

##### **Identification System (USA)**

Health:

**2 Moderate Hazard:** Temporary or minor injury may occur.

\* Chronic (long-term) health effects may result from repeated over exposure.

Fire:

**2 Moderate Hazard:** Materials which must be moderately heated or exposed to high ambient temperatures before ignition will occur.

Includes liquids having a flash point at or above 100 F but below 200 F (Classes II & IIIA).

Physical Hazard:

**1 Slight Hazard.** Materials that are normally stable, but can become unstable (self-react) at high temperatures and pressures. Materials may react non-violently with water or undergo hazardous polymerization in the absence of inhibitors.