

## SAFETY DATA SHEET

### 1. PRODUCT AND COMPANY IDENTIFICATION

**Product Name:**

**ecomate**<sup>®</sup>

**Other Means of Identification:**

Methyl formate

**Recommended Use:**

For industrial use in manufacturing substances or as a laboratory chemical.

**Company Information:**

Foam Supplies, Inc.  
13389 Lakefront Drive  
Earth City, MO 63045  
+1.314.344.3330  
www.foamsupplies.com

#### EMERGENCY RESPONSE

##### HEALTH & SAFETY

First Aid • Treatment  
Call ProPharma Group Co.  
FSI Dedicated #: 800.391.2138

##### CHEMICAL SPILLS

CALL CHEMTREC  
United States: 800.424.9300  
International: +1.703.527.3887  
www.chemtrec.com  
Reference: CCN 8678

### 2. HAZARD IDENTIFICATION

**Hazard Classification:**

Flammable Liquid – Category 1  
Acute Toxicity – Oral Category 4  
Acute Toxicity – Inhaled Category 4  
Eye Irritation – Category 2A  
Skin Irritation Category 2 – Specific Target Organ Toxicity –  
Single Exposure – Category 3 (Respiratory)  
Specific Target Organ Toxicity – Single Exposure Category 2 (Optic Nerve, Central Nervous System)

**Label Elements:**

Signal Word: DANGER

Pictogram(s):



**Hazards:**

Extremely flammable liquid and vapor.  
Harmful if swallowed.  
Harmful if inhaled.  
Causes serious eye irritation.  
Causes skin irritation.  
May cause respiratory irritation.  
May cause damage to central nervous system or optic nerve if ingested.

**Precautionary Statements:**

Do not breathe vapor or mist.  
 Use only outdoors or in a well-ventilated area.  
 Keep away from heat, sparks, and open flames. No smoking.  
 Keep container tightly closed.  
 Ground/Bond container and receiving equipment.  
 Use explosion-proof electrical, ventilating, and lighting equipment.  
 Use only non-sparking tools.  
 Take precautionary measures against static discharge.  
 Wear protective gloves, protective clothing, and eye protection.  
 Wash hands thoroughly after handling.  
 Do not eat, drink, or smoke when using this product.  
 If exposed or concerned: Call a poison center or doctor.  
 IF ON SKIN (or Hair): Take off immediately all contaminated clothing. Wash skin with plenty of water.  
 Specific treatment (see First Aid Measures in Section 4 of Safety Data Sheet).  
 If skin irritation occurs: Get medical attention.  
 Take off contaminated clothing and wash it before reuse.  
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
 If eye irritation persists: Get medical attention.  
 IF SWALLOWED: Call a poison center or doctor if you feel unwell.  
 Rinse mouth.  
 IF INHALED: Remove person to fresh air and keep comfortable for breathing.  
 Call a poison center or doctor if you feel unwell.  
 (see Fire-Fighting Measures in Section 5 of Safety Data Sheet).  
 Store in a well-ventilated place. Keep cool.  
 Store locked up.  
 Dispose of contents/container in accordance with local, state, national and international regulations.

**Other Hazards:**

None Known.

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

Hazardous Component	CAS #	% by Weight
Methyl formate	107-31-3	≥97%
Methanol	67-56-1	≤3%

**4. FIRST-AID MEASURES****Emergency and First Aid Procedures:**

**Eyes:** Rinse eyes with large amounts of lukewarm water for several minutes. If present, remove contact lenses only if easy to do so. Continue rinsing for at least 15 minutes. Seek medical attention if irritation persists.

**Skin:** Remove contaminated clothing. Wash affected skin with plenty of soap and water. Seek medical attention if irritation occurs.

#### 4. FIRST-AID MEASURES (cont.)

**Inhalation:** Move person to fresh air and keep them calm. If not breathing, give artificial respiration. Get medical attention immediately.

**Ingestion:** Rinse mouth and drink plenty of water. Induce vomiting. Never give anything by mouth or induce vomiting in an unconscious person. Get medical attention immediately.

**Note to Physician:** Treat supportively and symptomatically. No known antidote.

#### 5. FIRE-FIGHTING MEASURES

**Suitable Extinguishing Media:** Water spray, dry powder, foam, carbon dioxide.

**Unsuitable Extinguishing Media:** None known.

**Specific Hazards:** No known specific hazards other than normal combustion products of carbon monoxide, carbon dioxide, and irritating smoke. Sealed containers may build pressure in a fire situation. Spray containers with water to keep cool if safe to do so.

**Protective Equipment /Precautions for Fire-fighters:** Fire-fighters should be equipped with full protective fire gear and a self-contained breathing apparatus.

**Notes on Explosion Hazards:** There is no shock-sensitivity expected.

#### 6. ACCIDENTAL RELEASE MEASURES

**Personal Precautions / Protective Equipment:** Use proper protective equipment as prescribed in Section 8 of this Safety Data Sheet. Ensure adequate ventilation and avoid breathing vapors or mist. Vapors may accumulate to explosive concentrations. Take extreme caution in low-lying or enclosed areas as vapors will easily accumulate there.

**Emergency Procedures:** Clear area of all non-essential personnel. Remove all sources of ignition. Stop spill if safe to do so. Do not allow product to enter sewers or drains.

**Containment and Cleanup:** Contain and soak up spill with absorbent material and place in suitable container for disposal.

#### 7. HANDLING AND STORAGE

**Precautions for Safe Handling:** Avoid skin or eye contact and do not inhale vapors. Keep away from sources of ignition and take precautions against static discharge. Do not eat, drink, or smoke while handling this product.

**Conditions for Safe Storage:** Keep container tightly closed in a well-ventilated, dry area. Keep container cool.

**Incompatibilities:** Do not store with alkalies or alkalizing substances.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**PEL/TLV:** OSHA & ACGIH TWA – 100 ppm, 250 mg/m<sup>3</sup>  
OSHA & ACGIH STEL – 150 ppm, 375 mg/m<sup>3</sup>

**Engineering Controls:** Use local exhaust ventilation to prevent the accumulation of vapors. Use explosion-proof equipment when using this product. Ground/Bond the containers when transferring material to prevent static discharge. Have safety showers and eye wash stations immediately available.

**Protective Equipment:** Wear chemical resistant gloves and clothing to prevent skin contact. Wear snug fitting safety goggles or glasses with side shields. Where ventilation is inadequate wear a respirator with appropriate organic vapor cartridges. Where vapor concentrations are extremely high or unknown wear a full-face supplied air respirator operated in positive pressure mode.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance:</b>	Clear liquid
<b>Odor:</b>	Slight ethereal odor
<b>Odor Threshold:</b>	No Data
<b>pH:</b>	4.0-5.0 @ 200 g/l, 20°C (68°F)
<b>Melting Point:</b>	No Data
<b>Freezing Point:</b>	-100°C (-148°F)
<b>Boiling Point:</b>	32°C (90°F)
<b>Flash Point:</b>	-19°C (-2°F)
<b>Evaporation Rate:</b>	No Data
<b>LEL/UEL:</b>	5.0% - 23.0% (V)
<b>Vapor Pressure:</b>	644 mbar @ 20°C (68°F)
<b>Vapor Density:</b>	2.07 (Air = 1.0)
<b>Relative Density:</b>	0.97 @ 20°C (68°F)
<b>Solubility:</b>	Soluble
<b>Partition Coefficient:</b>	-0.21
<b>Auto-Ignition Temp.:</b>	440°C (824°F)
<b>Viscosity (Dynamic):</b>	0.35 mPa.s @ 20°C (68°F)
<b>Viscosity (Kinematic):</b>	0.361 mm <sup>2</sup> /s @ 20°C (68°F)

## 10. STABILITY AND REACTIVITY

**Reactivity/Chemical Stability:** This product is stable under recommended handling and storage conditions.

**Hazardous Reactions:** Excessive vapors may form an explosive mixture with air.

**Conditions to Avoid:** Heat, sparks, or open flames. Keep away from sources or extreme heat and direct sunlight.

**Incompatible Materials:** Keep away from oxidizers.

**Hazardous Decomposition Products:** Carbon monoxide, carbon dioxide.

## 11. TOXICOLOGICAL INFORMATION

**Likely Routes of Exposure:** Skin and eye contact. Inhalation of vapors. Ingestion is possible but not likely under normal handling procedures.

**Toxicity Data:** LD50 Oral (Rat) – 1500 mg/kg  
LD50 Dermal (Rat) – >4000 mg/kg  
LC50 Inhaled (Rat) - >5.2 mg/l 4hr (Vapor)

**Effects and Symptoms:**

**Immediate:** Physical contact can cause irritation to skin and eyes. Cough, shortness of breath, and other symptoms of respiratory irritation may occur.

**Delayed:** Headache, nausea, and vomiting may occur if large amounts of vapor are inhaled or if material is ingested. Ingested material may inhibit the central nervous system causing disorientation, blurred vision, and other intoxication-like symptoms.

**Chronic:** None expected.

**Sensitization:** Not expected to cause skin or respiratory sensitization.

**Carcinogen:** This product does not contain any material listed as a carcinogen by NTP, IARC, or OSHA.

**Reproductive Toxicity:** No Data

**Teratogenicity:** No Data

**Mutagenicity:** No Data

## 12. ECOLOGICAL INFORMATION

**Ecotoxicity:**

**Toxicity to Fish:** LC50 – Leuciscus Idus (Golden Orfe) = 120 mg/l 96hr.

**Toxicity to Daphnia:** EC50 – Daphnia Magna (Water Flea) = >500 mg/l 48h.

**Persistence and Degradability:** Readily biodegradable according to OECD criteria.

**Bioaccumulative Potential:** Accumulation in organisms is not expected.

**Mobility in Soil:** No data.

**Other Adverse Effects:** No data.

## 13. DISPOSAL CONSIDERATIONS:

**Waste, Residue, or Chemical:** Do not release to water. DO NOT PUMP INTO ANY SEWERS, ON THE GROUND, OR INTO ANY BODY OF WATER. All disposal methods must be in compliance with all federal, state, and local laws and regulations. Regulations may vary in different locations. Waste characterizations and compliance with applicable laws are the sole responsibility of the waste generator. The preferred disposal option is sending waste to a licensed and permitted recycler, reclaimer, incinerator or other thermal destructive device. Foam Supplies, Inc. HAS NO CONTROL OVER THE MANAGEMENT PRACTICES OR MANUFACTURING PROCESSES OF PARTIES HANDLING OR USING THIS MATERIAL. THE INFORMATION PRESENTED HERE PERTAINS ONLY TO THE PRODUCTS AS SHIPPED IN ITS INTENDED CONDITION.

**Container:** Container should be treated with the same considerations as the product itself. Follow all local, state, national, and international regulations.

## 14. TRANSPORT INFORMATION

**DOT:**

UN #: 1243

Shipping Name: Methyl Formate

Hazard Class: 3

Packing Group: I

**IMDG:**

UN #: 1243

Shipping Name: Methyl Formate

Hazard Class: 3

Packing Group: I

Marine Pollutant: No

EMS-No: F-E, S-D

**IATA:**

UN #: 1243

Shipping Name: Methyl Formate

Hazard Class: 3

Packing Group: I

**Canadian TDG:**

UN1243, Methyl Formate, 3, I

**Bulk Transport:**

Same as above.

**Special Precautions:**

None known.

## 15. REGULATORY INFORMATION:

(Not meant to be all inclusive. Selected regulations represented.)

**NOTE:** The information herein is presented in good faith and believed to be accurate as of the effective date shown below. However, no warranty, express or implied, is given. Regulatory requirements are subject to change and may differ from one location to another. It is the buyer's responsibility to ensure that its activities comply with federal, state, and local laws. The following specific information is made for the purpose of complying with numerous federal, state, and local laws and regulations.

**US Regulations:**

**TSCA (Toxic Substance Control Act):** Regulations 40CFR 710: All ingredients are on the TSCA Section 8 (b) Inventory.

**SARA Hazard Category:** This product has been reviewed according to the EPA "Hazard Categories" promulgated under Sections 311 and 312 of the Superfund Amendments and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

- An immediate health hazard
- A delayed health hazard
- A fire hazard

## 15. REGULATORY INFORMATION:

**SARA 313:** This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR:

Hazardous Component	CAS #	RQ
Methanol	67-56-1	5000 lbs.

### State Right-To-Know:

Hazardous Component	CAS #	Listed States
Methyl Formate	107-31-3	PA, MA, NJ

**California Prop. 65 Statement:** This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

### Canadian Regulations:

**WHMIS:** This product has been classified according to the Canadian Workplace Hazardous Information System (Controlled Products Regulations) and has been assigned to the following hazard categories: B2 D2BB

**CPR Statement:** This product has been classified according to the hazard criteria of the CPR and the SDS contains all the information required by the CPR.

## 16. OTHER INFORMATION

### HMIS Classification:

2	HEALTH
4	FLAMMABILITY
0	REACTIVITY

### Product Literature:

Additional information on this product may be obtained by calling your sales or customer service contact.

### Product Stewardship:

Foam Supplies Incorporated and its subsidiaries are committed to stewardship and have a concern for, the health and safety for all individuals who come in contact with its products, as well as the environment. This philosophy is a foundation on which we assess information to appropriately protect individuals and preserve our environment. Success of stewardship rests with each and every individual involved in the cradle to grave life cycle of our products.

Foam Supplies supports and follows Responsible Care Guiding Principles.

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