

MATERIAL SAFETY DATA SHEET

ExxonMobil Chemical Company
A Division of Exxon Mobil Corporation

Date Prepared: June 16, 2000
MSDS No.: 92890627

VAR SOL 1 FLUID

SECTION 1 — CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: VAR SOL 1 FLUID (Mineral Spirit)
Chemical Name: N/A (Blend)
Chemical Family: Petroleum Hydrocarbon
Product Description: Clear colorless liquid with a petroleum odor

CONTACT ADDRESS: ExxonMobil Chemical Company
P.O. Box 3272
Houston, TX 77253-3272

EMERGENCY TELEPHONE NUMBERS (24 Hours): CHEMTREC: 1-800-424-9300
ExxonMobil: 1-800-726-2015

NON-EMERGENCY TELEPHONE NUMBERS (M-F 8 am-5pm):
For General Product Information: 281-870-6000
For Health and Medical Information: 281-870-6884

SECTION 2 — COMPOSITION / INFORMATION ON INGREDIENTS

The composition of this mixture may be proprietary information. In the event of a medical emergency, compositional information will be provided to a physician or nurse. This product is hazardous as defined in 29 CFR1910.1200, based on the following compositional information:

<u>OSHA HAZARD</u>	<u>COMPONENT</u>
Combustible	Petroleum Hydrocarbons
OSHA PEL; ACGIH TLV	Stoddard Solvent
OSHA PEL; ACGIH TLV	Trimethylbenzene
Possible Carcinogen	Ethylbenzene

SECTION 3 — HAZARDS IDENTIFICATION

POTENTIAL HEALTH EFFECTS:

Eye Contact: Slightly irritating but does not injure eye tissue.
Skin Contact: Frequent or prolonged contact may irritate and cause dermatitis. Low order of toxicity.
Skin contact may aggravate an existing dermatitis condition.

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- Inhalation:** High vapor/aerosol concentrations (greater than approximately 1000 ppm) are irritating to eyes and the respiratory tract, may cause headaches, dizziness, anesthesia, drowsiness, unconsciousness, and other central nervous system effects, including death.
- Ingestion:** Small amounts of this product aspirated into the respiratory system during ingestion or vomiting may cause mild to severe pulmonary injury, possibly progressing to death. Minimal toxicity.
- Chronic Effects:** This product contains ethylbenzene. The International Agency for Research on Cancer (IARC) has evaluated ethylbenzene and classified it as a possible human carcinogen (group 2B) based on sufficient evidence for carcinogenicity in experimental animals, but inadequate evidence for cancer in exposed humans.

SECTION 4 — FIRST AID MEASURE

- Eye Contact:** Flush eyes with large amounts of water until irritation subsides. If irritation persists, get medical attention.
- Skin Contact:** Flush with large amounts of water; use soap if available. Remove grossly contaminated clothing, including shoes, and launder before reuse.
- Inhalation:** Using proper respiratory protection, immediately remove the affected victim from exposure. Administer artificial respiration if breathing is stopped. Keep at rest. Call for prompt medical attention.
- Ingestion:** If swallowed, DO NOT induce vomiting. Keep at rest. Get prompt medical attention.

SECTION 5 — FIRE-FIGHTING MEASURES

- Flash Point:** 104°F, Method: TCC ASTM D56, Note: Minimum
- Flammable Limits:** LEL: 2.1 UEL: 13.3 @ 77°F Note: Approximate
- Auto-ignition Temp.:** 490°F Note: Approximate
- General Hazard:** Combustible Liquid, can form combustible mixtures at temperatures at or above the flashpoint. Static Discharge, material can accumulate static charges which can cause an incendiary electrical discharge. "Empty" containers retain product residue (liquid and/or vapor) and can be dangerous. DO NOT pressurize, cut, weld, braze, solder, drill, grind, or expose such containers to heat, flame, sparks, static electricity or other sources of ignition; THEY MAY EXPLODE AND CAUSE INJURY OR DEATH. Empty drums should be completely drained, properly bunged and promptly returned to a drum reconditioner, or properly disposed of.

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Fire Fighting: Use water spray to cool fire-exposed surfaces and to protect personnel. Isolate “fuel” supply from fire. Use foam, dry chemical, or water spray to extinguish fire. Avoid spraying water directly into storage containers due to danger of boil over. This liquid is volatile and gives off invisible vapors. Either the liquid or vapor may settle in low areas or travel some distance along the ground or surface to ignition sources where they may ignite or explode.

Decomposition Products Under Fire Conditions: No unusual

SECTION 6 — ACCIDENTAL RELEASE MEASURES

Land Spill: Eliminate sources of ignition. Prevent additional discharge of material, if possible to do so without hazard. For small spills implement cleanup procedures; for large spills implement cleanup procedures and, if in public area, keep public away and advise authorities. Also, if this product is subject to CERCLA reporting (see Section 15 Regulatory Information) notify the National Response Center. Prevent liquid from entering sewers, watercourses, or low areas. Contain spilled liquid with sand or earth. Do not use combustible materials such as sawdust. Recover by pumping (use an explosion proof or hand pump) or with a suitable absorbent. Consult an expert on disposal of recovered material and ensure conformity to local disposal regulations.

Water Spill: Eliminate sources of ignition. Warn occupants and shipping in surrounding and downwind areas of fire and explosion hazard and request all to stay clear. Remove from surface by skimming or with suitable absorbents. If allowed by local authorities and environmental agencies, sinking and/or suitable dispersants may be used in non-confined waters. Consult an expert on disposal of recovered material and ensure conformity to local disposal regulations.

SECTION 7 — STORAGE AND HANDLING

Electrostatic Accumulation Hazard: Use proper bonding and/or grounding procedure. Additional information regarding safe handling of products with static accumulation potential can be ordered by contacting the American Petroleum Institute (API) for API Recommended Practice 2003, entitled “Protection Against Ignitions Arising out of Static, Lightning, and Stray Currents” (American Petroleum Institute, 1220 L Street Northwest, Washington, DC 20005), or the National Fire Protection Association (NFPA) for NFPA 77 entitled “Static Electricity” (National Fire Protection Association, 1 Batterymarch Park, P.O. Box 9101, Quincy, MA 02269-9101).

Storage Temperature, °F:	Ambient
Loading/Unloading Temp., °F:	Ambient
Storage/Transport Pressure, mmHg:	Atmospheric
Loading/Unloading Viscosity, cSt:	1.2

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Storage and Handling: Keep container closed. Handle and open containers with care. Store in a cool, well ventilated place away from incompatible materials. Do NOT handle or store near an open flame, heat or other sources of ignition. Protect material from direct sunlight. Material will accumulate static charges which may cause an electrical spark (ignition source). Use proper bonding and/or grounding procedures. Do NOT pressurize, cut, heat, or weld containers. Empty product containers may contain product residue. Do NOT reuse empty containers without commercial cleaning or reconditioning.

SECTION 8 — EXPOSURE CONTROLS / PERSONAL PROTECTION

Exposure Controls: The use of local exhaust ventilation is recommended to control process emissions near the source. Laboratory samples should be handled in a lab hood. Provide mechanical ventilation of confined spaces. See respiratory protection recommendations.

Personal Protection: For open systems where contact is likely, wear safety glasses with side shields, long sleeves, and chemical-resistant gloves. Where contact may occur, wear safety glasses with side shields. Where concentration in air may exceed the limits given in this Section and engineering, work practice or other means of exposure reduction are not adequate, NIOSH approved respirators may be necessary to prevent overexposure by inhalation.

Workplace Exposure Guidelines: OSHA Regulation 29CFR1910.1000 requires the following permissible exposure limits: A TWA of 100 ppm (525 mg/m³) for Stoddard Solvent
A TWA of 25 ppm (125 mg/m³) for Trimethyl Benzene
The recommended permissible exposure levels indicated above reflect the levels revised by OSHA in 1989 or in subsequent regulatory activity. Although the 1989 levels have since been vacated by the 11th Circuit Court of Appeals, ExxonMobil Chemical Company recommends that the lower exposure levels be observed as reasonable worker protection. The ACGIH recommends the following threshold limit values:
A TWA of 100 ppm (525 mg/m³ for Stoddard Solvent)
A TWA of 25 ppm (123 mg/m³ for Trimethyl Benzene)
ExxonMobil recommends the following occupational exposure limits:
A TWA of 400 mg/m³ (66 ppm) based on total hydrocarbon)

SECTION 9 — PHYSICAL AND CHEMICAL PROPERTIES

Specific Gravity at °F:	0.80 at 60
Vapor Pressure, mmHg at °F:	1.6 at 68 Approximate
Solubility in Water, wt. % at °F:	Less than 0.01 at 77
Viscosity of Liquid, cSt at °F:	1.3 at 77 Approximate
Sp. Grav. Of Vapor, at 1 atm (Air = 1):	3.50 Calculated
Freezing/Melting Point, °F:	1
Evaporation Rate, n-Bu Acetate=1:	Less than 0.1
Boiling Point, °F:	315 to 394

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SECTION 10 — STABILITY AND REACTIVITY

Stability:	Stable
Conditions to Avoid Instability:	N/A
Hazardous Polymerization:	Will not occur
Conditions to Avoid Hazardous Polymerization:	N/A
Materials and Conditions to Avoid Incompatibility:	Halogens, molten sulfur, strong oxidizing agents
Hazardous Decomposition Products:	None

SECTION 11 — TOXICOLOGICAL INFORMATION

Please refer to Section 3 for available information on potential health effects.

SECTION 12 — ECOLOGICAL INFORMATION

No specific ecological data are available for this product. Please refer to Section 6 for information regarding accidental releases and Section 15 for regulatory reporting information.

SECTION 13 — DISPOSAL CONSIDERATIONS

Please refer to Sections 5, 6 and 15 for disposal and regulatory information.

SECTION 14 — TRANSPORT INFORMATION

Department of Transportation (DOT):

DOT Shipping Description: Petroleum Distillate, N.O.S., Combustible Liquid, UN 1268, III

Note: In containers of 119 gallons capacity or less this product is not regulated by DOT.

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SECTION 15 — REGULATORY INFORMATION

TSCA: This product is listed on the TSCA Inventory as a UVCB (Unknown, Variable Composition or Biological) Chemical at CAS Registry Number 8052-41-3.

Clean Water Act/Oil Pollution Act: This product is classified as an oil under Section 311 of the Clean Water Act (40 CFR 110) and the Oil Pollution Act of 1990. Discharge or spills which produce a visible sheen on either surface water, or in waterways/sewers which lead to surface water, must be reported to the National Response Center at 1-800-424-8802.

SARA, Title III: Under the provisions of Title III, Sections 311/312 of the Superfund Amendments and Reauthorization Act, this product is classified into the following hazard categories:
Delayed Health, Fire.

This information may be subject to the provisions of the Community Right-to-Know Reporting Requirements (40 CFR 370) if threshold quantity criteria are met.

This product contains the following Section 313 Reportable Ingredients:

CONTENT	CAS #	Max. %
1,2,4 Trimethylbenzene	95-63-6	4.0

SECTION 16 — OTHER INFORMATION

Notes: Contains approximately 10 ppm BHT as an antioxidant to protect product quality.

Hazard Rating Systems: This information is for people trained in:

National Paint and Coatings Association (NPCA)
Hazardous Materials Identification System (HMIS)
National Fire Protection Association (NFPA 704)
Identification of the Fire Hazards of Materials

	NPCA-HMIS	NFPA 704	Key
Health	1	0	4 = Severe
Flammability	2	2	3 = Serious
Reactivity	0	0	2 = Moderate
			1 = Slight
			0 = Minimal

Revision Summary: Since April 1, 2000 this MSDS has been revised in Sections 2, 3, 8

Reference Number: HDHA-C-25038

Supersedes Issue Date: April 1, 2000

This information relates to the specific material designated and may not be valid for such material used in combination with any other materials or in any process. Such information is to the best of our knowledge and belief, accurate and reliable as of the date compiled. However, no representation, warranty of guarantee is made as to its accuracy, reliability or completeness. It is the user's responsibility to satisfy himself as to the suitability and completeness of such information for his own particular use. We do not accept liability for any loss or damage that may occur from the use of this information, nor do we offer warranty against patent infringement.

PYLAM Products Company, Inc.

General Information

Material Safety Data Sheet Information to be Provided

1. The identity that is used on the container label;
2. The chemical and common name of all ingredients having known health hazards present in concentrations greater than 1%, and for carcinogens, if present at 0.1% or more;
3. The physical and chemical characteristics of the hazardous components;
4. The physical and health hazards including signs and symptoms of exposure and prior and/or existing contraindicating medical conditions;
5. The primary routes of entry;
6. Any known exposure limits (OSHA, PELs or ACHTH TLVs);
7. Whether the hazardous chemical is listed in the *NTP Annual Report on Carcinogens* or is a potential carcinogen according to LARC or OSHA;
8. The precautions for safe handling and use, and procedures for spill/leak cleanup;
9. Control measures;
10. The emergency first aid procedures;
11. The date of preparation; and
12. The name, address, and telephone of the company or the responsible employee distributing the MSDS.

Trade Secrets (Also see Section I — Federal Register Vol. 48 No. 228 Nov. 25, 1983 Rules and Regulations)

OSHA has given special consideration to chemical information that the chemical manufacturer or distributor considers to be a trade secret (29 CFR 1910.1200(1)). Products for which trade secrecy has been claimed must be accompanied by a material safety data sheet. The manufacturer also must specify on the MSDS that the chemical's identity is a trade secret.

In certain circumstances the user may need to know the specific chemical identity of the substance in order to protect the health of its workers. The OSHA procedures for obtaining this information are designed to balance the need-to-know for health protection with the economic value for maintaining the trade secret. If adequate health protection can be achieved only by knowledge of a chemical name, then procedures can be implemented to release the name. In no case can the chemical manufacturer or distributor be forced to disclose a trade secret revealing the chemical process or the percentage composition of the product.

When the specific name of a chemical is desired for protection of worker health in a non-emergency circumstance, such as the desire to monitor the worker or the workplace for specific chemicals, the health officer must request in writing the chemical name and state the specific reasons as to why the information on the material safety data sheet is not sufficient. Proof must be provided that the chemical identity is needed. Finally, a statement guaranteeing confidentiality is necessary but no penalty bond need be posted.

After receipt of this request, the chemical manufacturer has 30 days in which to reply. If the manufacturer still wishes to claim confidentiality, it must prove that the chemical identity is indeed an important trade secret. If the parties cannot reach an agreement, OSHA will arbitrate.

If an emergency, the procedures for obtaining the chemical name are different than in a non-emergency. A health officer (e.g. a physician or industrial hygienist) for the employer may contact the chemical manufacturer and be told the name of the specific chemical. The chemical manufacturer may not withhold the information requested at the time of the emergency, although the manufacturer may request a follow-up written statement of need and a promise of confidentiality.

MATERIAL SAFETY DATA SHEET

Calco Oil Red N-1700 62447

SECTION I — IDENTIFICATION

Company Name: Pylam Products
Emergency Phone Number: (480) 929-0070
Effective Date: 5/31/1990
Revised Date: 1/10/2000
Chemical Name: Solvent Red 26 (Red dye in Mineral Spirits)
Trade Name: Calco Oil Red N-1700
Chemical Family: Disazo
Chemical Formula: C₂₅ H₂₂ N₄ O

SECTION II — HAZARDOUS INGREDIENTS

Hazardous Components	Hazardous %	TLV (Units)	Prod. CAS #
None as per 29CFR Part 1910.1200			4477-79-6
None under Title III of SARA			

SECTION III — PHYSICAL DATA

Boiling Point (°F): N/A
Freezing Point (°F): N/A
Volatility/Vol (%): N/A
Melting Point: N/A
Vapor Pressure: N/A
Vapor Density (Air=1): N/A
Solubility in H₂O: Soluble
Appearance/Odor: Red powder/No odor
Specific Gravity (H₂O=1): N/A
Evaporation Rate: N/A
pH: N/A

SECTION IV — FIRE AND EXPLOSION HAZARD DATA

Flash Point: N/A
Lower Flame Limit: N/A
Higher Flame Limit: N/A
Extinguish Media: In case of fire, use water spray, foam, dry chemical, or CO₂
For Fire: Dust may form explosive mixture with air
Unusual Fire Hazard: None

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SECTION V — HEALTH HAZARD DATA

Threshold Limit Value: N/A
Overexposure Effects: NFPA Rating: H2, F1, R0
HMIS Rating: H2, F1, R0, PP=E
Solvent Red 26: No applicable information was found concerning any adverse acute/chronic health effects resulting from overexposure to this product

CONEG MODEL TOXIC LEGISLATION

Chromium: Less than 10 ppm
Cadmium: Less than 10 ppm
Mercury: Less than 1 ppm
Arsenic: Less than 10 ppm
Lead: Less than 10 ppm
Antimony: Less than 10 ppm

First Aid Procedures:

Inhalation: If large amounts are inhaled, remove to fresh air. If not breathing, give artificial respiration, preferably mouth-to-mouth. If breathing is difficult give oxygen and call a physician.
Skin contact: Flush skin with plenty of water after excessive contact. Wash thoroughly with hand cream or hand cleaner.
Eye contact: Flush eyes immediately with plenty of water for at least 15 minutes. Call a physician.
Ingestion of powder: Induce vomiting immediately by giving two glasses of water. Get medical attention. Never give fluids to an unconscious person.
Ingestion of liquid: Seek medical attention as soon as possible. Inducing vomiting is sometimes recommended.

SECTION VI — REACTIVITY DATA

Chemical stability: Stable
Conditions to avoid: None
Incompatible Materials: Oxidizing and reducing agents may destroy color
Decomposition Products: CO, CO₂, Oxides of Nitrogen, Sulfur and other potentially toxic fumes
Hazardous Polymerization: None expected

SECTION VII — SPILL OR LEAK PROCEDURE

For Spill: Spills should be swept up and placed in containers. Spill areas can be washed with water; collect wastewater for approved disposal.
Waste Disposal Method: Waste disposal should be in accordance with existing federal, state and local environmental regulations.

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Calco Oil Red N-1700 62447

SECTION VII(A) — REGULATORY INFORMATION

MITI (Japanese): We do not have access to inventory
AICS (Australian): We do not have access to inventory
CALIF PROP 65: None unless indicated in Section II
EPA (TSCA): All components are in compliance
EINECS/ELINCS: All components should be listed – see CAS number(s)
RCRA: Not regulated
CERCLA: Not regulated
WHMIS: See component(s) – CAS numbers
USDA: Most products are on file. Please check with our registration department
DSL/WDSL: All components should be listed – see CAS number(s)
Carcinogenicity:
HTP, IARC, OSHA: None unless indicated in Section II of this material safety data sheet

SECTION VIII — SPECIAL PROTECTION

Respiratory Protection: Employees should avoid inhalation of dusts. Whenever potential for dusting exists and appropriate NOISH/NSHA approved respirator with dust filter should be worn.
Ventilation: Use local ventilation if dusting is a problem.
Protective Gloves: Wear suitable gloves.
Eye Protection: Wear eye/face protection
Other Protective Equip.: None
Handling & Storage: In accordance with good industrial practices, handle with care to avoid contact

SECTION IX — SPECIAL PRECAUTIONS

Hazard Class: None
DOT Shipping Name: None
Reportable Quantity (RQ): None
UN Number: None
NA Number: None
Packaging Size: N/A

Pylam Products Company, Inc.
2175 East Cedar Street
Tempe, AZ 85281-7431

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