

MATERIAL SAFETY DATA SHEET

Product Name: Formvar Solution
Catalog Number: 10805, 10810, 12065, 12070, 53150, 53151
DOT Hazard Class: 3 (Flammable Liquid)
DOT Proper Shipping Name: 1,2-dichloroethane
UN/NA ID No.: UN 1184
MSDS Updated: 9/2011

Distributed By: Ladd Research
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Williston, VT 05495
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HAZARDOUS COMPONENTS

	<i>CAS Number</i>	<i>Percent</i>	<i>Exposure Limits</i>
Formvar 15/95E Resin	63450-15-7	0-3%	5 mg/m ³ (ACGIH TLV)
1,2-dichloroethane	107-06-2	97-100%	50 ppm (OSHA PEL) 10 ppm (ACGIH TLV)

PHYSICAL AND CHEMICAL DATA

Boiling Point: 83.5°C
Vapor Pressure: 83.35 @ 20°C
Vapor Density: 3.4 (air = 1)
Specific Gravity: 1.253 @ 20°C
Melting Point: -35.66°C
Solubility: 0.81% in water at 20°C
Evaporation Rate: 0.3 (ether = 1)
Appearance and Odor: Liquid with ether-like odor.

FIRE AND EXPLOSION HAZARD DATA

Flash Point: 13 °C
Autoignition Temperature: 413°C
Explosive Limits: Lower = 6.2; Upper = 16.0
Extinguishing Media: Carbon dioxide or dry chemical for small fires, ordinary foam for large fires.
Special Fire Fighting Procedures: Wear full protective clothing and self-contained breathing apparatus. Keep fire-exposed containers cooled to prevent bursting.
Unusual Fire and Explosion Hazards: Concentrated vapors can be ignited by high intensity heat source or flame.

HEALTH HAZARD DATA

Primary Routes of Entry: Inhalation, skin, ingestion
Inhalation: Irritation to respiratory tract, nausea, vomiting, drowsiness, diarrhea, headache, dizziness, unconsciousness and even death in extreme cases.
Skin: Prolonged or repeated skin contact can cause irritation and dermatitis through delipidation of skin.
Eye: Pain and irritation with corneal injury possible.
Ingestion: Burning of throat and mouth and gastrointestinal distress. Liver damage can occur.

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EMERGENCY AND FIRST AID

Inhalation: Immediately remove to fresh air. If not breathing, administer mouth-to-mouth rescue breathing. Contact physician immediately.
Skin: Flush thoroughly for at least 15 minutes. Wash affected skin with soap and water.
Eye: Rinse with copious amounts of water for at least 15 minutes. Obtain emergency medical assistance.
Ingestion: Call local Poison Control Center for assistance. Contact physician immediately.

REACTIVITY DATA

Stability: Stable

Hazardous Polymerization: Will not occur

Conditions to Avoid: Heat, sparks, open flame, open containers, poor ventilation and moisture.

Incompatibility: Strong oxidizing agents, active metals and strong alkaline solutions.

Hazardous Decomposition Products: Incomplete combustion can generate phosgene, hydrogen chloride and other toxic vapors.

SPILL, DISPOSAL AND STORAGE INFORMATION

Spill: Protect from ignition. Absorb spilled material in an absorbent and remove to safe location.

Disposal: Dispose of as and EPA hazardous waste (Hazardous waste number U077[toxic]).

Storage: Store in an acceptably protected and secure flammable liquid storage room

PROTECTIVE EQUIPMENT AND CONTROL MEASURES

Respiratory: Use approved respirator.

Gloves: Impervious

Eye: Goggles or face shield recommended

Ventilation: Mechanical ventilation advised

SECTION 313 SUPPLIER NOTIFICATION

Ethylene dichloride is regulated by SARA Title III.

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