

**SAFETY DATA SHEET**

Trade Name: Raybo 158

Version: 12.1

Revision Date: 1-4-12

**1) Identification of the Substance/Preparation and Company**Trade Name: **Raybo 158****Identification of the manufacturer/Supplier**

**Address:** Raybo Chemical Company  
PO Box 2155  
Huntington, WV 25725

**Telephone:** 304-525-5171

**Fax:** 304-525-2921

**Information provided by/Telephone**

304-525-5171 William F Reid, Technical Director

**Emergency Telephone Number**

Chem Trec 800-424-9300 (Domestic)

Chem Trec 703-527-3887 (International)

**2) Composition/Information on Ingredients**

<b>Hazardous Ingredients</b>	<b>OSHA PEL</b>	<b>ACGIH TLV</b>	<b>SARA 313%</b>
Cyclohexanol CAS NO: 108-93-0 Einecs NO: 603-009-00-3	50 PPM	50 PPM (Skin)	20.0%
Solvent Naphtha (Petroleum) Heavy Aromatic CAS NO: 64742-94-5 Einecs NO: 649-424-00-3	Not Established	Not Established	29.25%
Naphthalene CAS NO: 91-20-3 Einecs NO:	10 PPM	10 PPM TWA	3.13%
1,2,4 Trimethylbenzene CAS NO: 95-63-6 Einecs NO: 601-043-00-3	25 PPM TWA	25 PPM TWA	0.56%

NOTE: CONTENTS PARTIALLY UNKNOWN

**3) Potential Health Effects and Hazards**

HMIS Rating: Health (2) Flammability (2) Reactivity (0) Personal Protection ( )

**Eye:** Contact/exposure to liquid or high vapor concentrations can cause severe eye irritation. Symptoms include tearing, and blurred vision.

**Skin:** Contact/exposure may cause skin irritation. Prolonged contact/exposure may result in defatting and skin dermatitis.

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- Ingestion:** Single dose oral toxicity is low. Ingestion/swallowing small amounts of this material during normal handling are not likely to cause harmful effects. Swallowing large amounts may result in severe GI irritation.
- Inhalation:** Breathing of vapor or mist during normal handling and use is possible. Breathing large amounts during application or misuse of product may cause respiratory irritation and possible unconsciousness. Avoid air concentrations exceeding recommended exposure limits (See Section 2).
- Chronic:** No data. Prolonged or repeated contact/exposure to this product without appropriate PPE is potentially harmful.  
(Information)
- Developmental:** No data. As a precaution, avoid prolonged or repeated contact/exposure to liquid or vapor.  
(Information)
- Symptoms of Exposure:** Signs and symptoms of exposure to this product through eye contact, breathing, swallowing, and/or skin contact/exposure may include, severe eye irritation (tearing and blurred vision), skin irritation, respiratory irritation, dizziness, weakness, fatigue, nausea, headache, breakage of red blood cells, kidney damage, lung damage, and respiratory failure.

**4) First Aid Measurers**

- Eyes:** If symptoms develop, remove from exposure. Flush eyes with water to reduce irritation. If symptoms persist, seek immediate medical attention.
- Skin:** Remove affected clothing. Flush exposed skin with water to reduce irritation. If symptoms persist, seek medical attention.
- Ingestion:** If symptoms develop, seek medical attention/advice. Contact a doctor or poison control center for advice about whether to induce vomiting.
- Inhalation:** If symptoms develop, move away from exposure and into fresh air. If symptoms persist, keep the person warm and quiet. Seek medical attention. If breathing is difficult, administer oxygen.

NOTE TO PHYSICIAN: Note hazardous material component(s) (Section 2).

**5) Fire Fighting Measurers****Flammable Properties**

Flash Point	132°F (55°C)	Method: Tag Closed Cup (TCC)
Flammable Limits:		
Lower Flammable Limits:		Unknown
Upper Flammable Limits:		Unknown
Autoignition Temperature:		No Data

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Hazardous Combustion Products:	Products of combustion may include carbon monoxide, carbon dioxide, hydrocarbons, and oxides of nitrogen.
Extinguishing Media:	Carbon dioxide or dry chemical for small fires. Alcohol type or general-purpose foam for large fires. Water spray may be ineffective. Water may be used to cool containers to prevent pressure buildup and possible autoignition.
Fire Fighting Instructions:	Wear self-contained breathing apparatus with all appropriate turn-out gear and chemical resistant protective equipment. Closed containers may explode when exposed to extreme heat. Isolate from heat, electrical equipment, sparks, and open flames.

**6) Accidental Release Measures**

Personal Precautions:	Provide adequate ventilation. Wear appropriate personal protective equipment (PPE) and exclude those unprotected from the area. Eliminate all sources of ignition.
Environmental Precautions:	Prevent discharge to streams, lakes, or other bodies of water. Pump liquid to a salvage tank. Notify supervisors or proper authorities that a spill has occurred. (See Section 13 for Disposal Information.)
Methods for Cleaning Up:	Stop spill at source. Immediately collect and containerize uncontaminated product and use in non-critical areas if possible. If contaminated (dirt, deleterious materials, etc..) containerize and absorb any residual or unrecoverable product with vermiculite, floor absorbent, etc.

**7) Handling and Storage**

Solvent Naphtha Heavy Aromatic is reported to behave as a static accumulator. Static electricity may accumulate even when transferred to a properly grounded and bonded container. Insure that the receiving container is bonded to the discharge tube throughout the filling process.

Bonding and grounding alone may be insufficient to eliminate fires and explosions associated with electrostatic charges. Special precautions such as inerting, reduction in transfer velocities, and not filling portable containers on a nonconductive surfaces should be emphasized.

**Handling:** Handle all containers (even empty) with caution. Avoid storage in high temperature areas. Do NOT use product near heat, sparks, open flame, or other sources of ignition. Empty containers retain product residue (vapor, liquid, and/or solids). Vapors are heavier than air and may travel along the ground or be moved by ventilation and ignited by ignition sources at locations distant from the handling point. Use recommended PPE (Section 8) when handling containers. Ensure the availability of emergency eyewash and shower facilities. Minimize inhalation.

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**Storage:** Store closed containers in a cool, well ventilated place away from ignition sources and incompatible material. Keep containers tightly closed.

**8) Exposure Controls/Personal Protection**

**Engineering Controls:** Provide sufficient mechanical ventilation (general or local exhaust) to maintain exposure below TLV(s) listed in Section 2. Always provide mechanical ventilation in confined spaces.

**Respiratory Protection:** If engineering controls do not maintain airborne concentrations below recommended exposure limits (Section 2), an approved (NIOSH/MSHA) respirator must be worn. Respirator type: Chemical cartridge; mist, organic vapor (appropriate up to 10X PEL. Consult your Safety Administrator. Respiratory protection should be in compliance with standard 29 CFR1910.134.

**Skin Protection:** During handling and application wear solvent resistant gloves, rubber or Buna N. Wear clothing/coveralls appropriate for the risk of exposure.

**Eye Protection:** During handling and application, minimum recommended protection is chemical splash proof goggles in compliance with OSHA regulations. Other type(s) safety glasses may be permitted. Consult your Safety Administrator.

**9) Physical and Chemical Properties**

Boiling Point	Unknown
Melting Point	Not Applicable
Vapor Pressure	Unknown
Vapor Density	Heavier than Air
Solubility in Water	Forms an emulsion
Specific Gravity	0.93 ± 0.01
PH	Not Applicable
Odor	Aromatic odor
Appearance	Amber liquid

**10) Stability and Reactivity**

**Stability:** Stable Product

**Incompatible (Conditions to Avoid):** Avoid contact/exposure to strong oxidizing agents.

**Hazardous Decomposition Products:** Products of decomposition include carbon monoxide, carbon dioxide, hydrocarbons, and oxides of nitrogen.

**Hazardous Polymerization:** This product will NOT undergo hazardous polymerization.

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Thermal Decomposition: No decomposition when used as directed.

**11) Toxicological Information**

Exposure Limit of Material: See Section 2

Carcinogenicity: The following components of this product have been identified by ACGIH, IARC, NTP, and/or OSHA as confirmed/suspected human carcinogens: Naphthalene is listed as human carcinogen.

Acute Oral Toxicity:

Solvent Naphtha (Petroleum) Heavy Aromatic	LD 50 Rat	3,000 mg/Kg
Naphthalene	LD 50 Rat	490 mg/kg
1,2,4-Trimethylbenzene	LD 50 Rat	6,000 mg/kg
Cyclohexanol	LD 50 Rat	1,400 mg/Kg

Acute Inhalation Toxicity:

Solvent Naphtha (Petroleum) Heavy Aromatic	LC 50 Rat	>3,800 mg/m <sup>3</sup>	4 hr
1,2,4-Trimethylbenzene	LC 50 Rat	18 g/m <sup>3</sup>	4 hr
	LC 50 Rat	>2,000 mg/L	48 hr
Cyclohexanol	LC 50 Rat	>6,500 mg/m <sup>3</sup>	1 hr

Acute Dermal Toxicity:

Solvent Naphtha (Petroleum) Heavy Aromatic	LD 50 Rabbit	>3,000 mg/kg
Naphthalene	LD 50 Rabbit	>2,000 mg/kg
	LD 50 Rat	>20,000 mg/kg
1,2,4-Trimethylbenzene	LD 50 Rabbit	>3,160 mg/kg
Cyclohexanol	LD 50 Rabbit	794 mg/Kg

Medical Conditions Aggravated by Over Exposure: Certain pre-existing respiratory and skin disorders may be aggravated by contact/exposure to this product.

**12) Ecological Information**

Ecotoxicological Information: No Data

Chemical Fate Information: No Data

**13) Disposal Considerations**

As local regulations may vary, all waste must be disposed of in accordance with Federal, State, and Local Environmental Protection Regulations. Incinerate waste liquid or consign it to a hazardous waste facility. **DO NOT LANDFILL.**

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Preferably; to minimize waste, use ONLY the amount necessary for the intended purpose. Store product properly for future use.

**14) Transport Information**

Land: USA: Corrosive Liquid, Basic, N.O.S. (Solvent Naphtha (Petroleum) Heavy Aromatic, Polyamino Resin, Cyclohexanol) 8, UN3267, PGIII

International: Flammable Liquid, Corrosive, N.O.S. (Solvent Naphtha (Petroleum) Heavy Aromatic, Polyamino Resin, Cyclohexanol) 3, (8), UN2924, PGIII

Marine: IMDG/GGVSee: Flammable Liquid, Corrosive, N.O.S. (Solvent Naphtha (Petroleum) Heavy Aromatic, Polyamino Resin, Cyclohexanol) 3, (8), UN2924, PGIII, IMCO Class 8, EMS F-E, S-C

Air ICAO/IATA: Flammable Liquid, Corrosive, N.O.S. (Solvent Naphtha (Petroleum) Heavy Aromatic, Polyamino Resin, Cyclohexanol) 3, (8), UN2924, PGIII

**15) Regulatory Information**

USA: Consult 29 CFR for applicable OSHA regulations. See Section 2 for permissible exposure limits. See Section 8 for minimum personal protection recommendations.

CERCLA: Reportable Quantities (RQ): None Reported

SARA Hazard Categories: Immediate (X) Delay (X) Fire (X) Reactive ( ) Sudden Release of Pressure ( )

SARA 313 Reportable:

Naphthalene	3.13%
1,2,4 Trimethylbenzene	0.56%

HAP (Hazardous Air Pollutants):

VOC (Volatile Organic Content):

State "Right to Know": The following states have "Right to Know" laws, which may require user notification of Section 2 ingredients. Consult appropriate authorities to determine applicability. CA, NJ, PA, MA, CT, FL, LA, NY, RI.

Specifically: NJ "Right to Know" contents partially unknown

	CAS	CA Prop 65	NJ	PA	MA
Naphthalene	91-20-3	X	X	X	X
1,2,4 Trimethylbenzene	95-63-6	No	X	X	X

International

Canadian NPRI:

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Canadian WHMIS: Class B, Division 3, Class E	
AICS – Australian Inventory of Chemical Substances:	Listed
EINECS – European Inventory of Existing Commercial Chemical:	Listed
CEPA (DSL) Canadian Environmental Protection Act:	Listed
MITI – Japanese Existing & New Chemical Substances List:	Listed
IECSC – Chinese Chemical Substance List:	Listed
TCCL – Korean Chemical Substance List:	Listed

CA Proposition 65: Trace amounts of Napthalene are reported by the State of California as human carcinogens.

**16) Other Information**

The provided information pertains to this product as currently formulated, and is based on information made available to us at this time. Addition of reducers or additives to this product may substantially alter the composition and hazards of this product. Since conditions of use are outside our control, we make no warranties, express or implied, and assume no liability in connection with any use of this information.

**Department Issuing Safety Data Sheet**

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