



# MATERIAL SAFETY DATA SHEET

Prepared in accordance with  
OSHA Hazard Communication Standard 29 CFR 1910.1200

**Manufacturer's Name:** Environmental Specialists Inc.  
243 East Marshall Road  
McDonald, OH 44437

**Date of Preparation:** September 1, 2008

**Emergency Telephone Number**  
\*\*\*PERS (888) 633 – 8253\*\*\*

**Information Telephone Number**  
\*\*\*(888) 331 – 3443\*\*\*

## SECTION 1: PRODUCT IDENTIFICATION

**Product Name:** RC105 Solvent

**Synonym:** Low Flash Solvent, Parts Washer Solvent  
Stoddard Solvent, Mineral Spirits

**Product Number:** RC-105

**Formula:** Aliphatic Hydrocarbon

## SECTION 2: COMPOSITION INFORMATION

Components	CAS Number	Weight %
Aliphatic Petroleum Distillates	64742-47-8	99 – 100%

## SECTION 3: HAZARDS IDENTIFICATION

**Eye Contact:** May cause mild eye irritation.

**Skin:** Contact with the skin may cause drying and irritation.

**Ingestion:** Ingestion of mineral spirits may cause nausea, vomiting, and in severe cases, drowsiness progressing to coma, and death by hemorrhagic pulmonary edema and renal involvement.

**Inhalation:** May be harmful if inhaled. Inhalation of high concentrations may cause headache, nausea, confusion, drowsiness, convulsions, and coma. Mists may also cause mucous membrane irritation.

**Medical Conditions Aggravated:** Pre-existing dermatitis may be aggravated. Individuals with pre-existing respiratory tract, central nervous system, kidney, and eye disorders may have increased susceptibility to the effects of exposure.

**Chronic:** Prolonged or repeated inhalation may cause central nervous system and kidney damage. Prolonged or repeated eye contact may cause inflammation of the membrane lining the eyelids and covering the eyeball. Repeated contact with skin may cause drying, cracking, redness, itching, and or swelling (dermatitis).



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## SECTION 4: FIRST AID MEASURES

- Eye Contact:** Flush eye immediately with fresh water for 15 minutes. Remove contact lenses if worn. Eyelids should be held away from the eyeball to ensure thorough rinsing. Seek medical attention.
- Skin:** Remove clothing and shoes if contaminated. To remove material from skin, use soap and water. Seek medical attention if irritation or pain develops or persists.
- Ingestion:** **DO NOT** induce vomiting. Immediately get medical attention. If spontaneous vomiting occurs, keep head below the hips to avoid breathing the product into the lungs.
- Inhalation:** If exposed to excessive levels of material in the air, move the exposed person to fresh air. Get medical attention if coughing or respiratory problems persist.

## SECTION 5: FIRE FIGHTING MEASURES

### Flammable Properties:

**Flash Point:** Tag Closed Cup = 105° F (40° C)

**Flammable Limits:** LEL – 0.7 Vol% Minimum UEL – 5 Vol% Maximum

**Autoignition:** 410° F (210° C)

**Hazardous Combustion Products:** Carbon dioxide, carbon monoxide, unidentified organic compounds. Decomposition and combustion materials may be toxic.

**Extinguishing Media:** Use dry chemical, carbon dioxide, water fog, or foam to extinguish all fires.

**Fire Fighting Instructions:** This material will burn easily if ignited. For fires involving this material, do not enter any enclosed or confined fire space without proper protective equipment, including self-contained breathing apparatus.

Use a smothering technique to extinguish a liquid fire. Do not force water stream directly on solvent fires, as this will scatter the fire. Use a water fog to cool fire-exposed containers, structures, and to protect personnel.

**Fire and Explosion Hazards:** Vapors are a source of explosion hazard indoors, outdoors, or in sewers. Vapors may travel to an ignition source and flashback. Vapors have the potential to spread along the ground and collect in low areas or confined spaces. Run-off into a sewer may create an explosion and fire hazard. Heated containers may rupture. "Empty" containers may retain residue and can be dangerous.



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## SECTION 6: ACCIDENTAL RELEASE MEASURES

- Protective Measures:** Eliminate all source of ignition in vicinity of spilled material. Do not touch or walk through spilled product. Keep non-essential and unprotected personnel from entering the area. If spill occurs indoors, ventilate area and avoid breathing vapors or mist. A vapor suppressing foam may be used to reduce vapors.
- Spill Management:** Stop the source of the release if it can be done without risk. Contain release to prevent further contamination of soil, surface water or groundwater. DO NOT flush down public sewers or other drainage systems. Place contaminated materials in appropriate containers and dispose of in accordance with local, state, and federal regulations. Store in a cool, dry, well-ventilated area away from heat, sources of ignition and incompatibles.
- Spill Reporting:** The Clean Water Act requires the reporting of any discharge of petroleum based materials (in any form) into surface waters. **Immediately** call the national Emergency Response Center at 1-800-424-8802.

## SECTION 7: HANDLING AND STORAGE

- Handling:** To avoid contamination of product keep containers closed when not in use. Empty containers retain product residues (solid, liquid, and/or vapor) that can be dangerous. Do not pressurize, cut, weld, braze, solder, drill, grind or expose containers to flames, sparks, heat or other potential ignitions sources. Empty containers should be completely drained, properly closed, and promptly returned to drum reconditioner or disposed of properly.
- Storage:** Keep containers tightly closed when not in use. Store in a cool, dry well-ventilated area. Do not store with strong oxidizing agents. Keep away from open flames and high temperatures.

## SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

- Engineering Controls:** Use in a well-ventilated area. Provide exhaust ventilation or other engineering controls to keep the airborne concentrations of mists and/or vapors below the recommended exposure limits (see below). Have an eye wash station readily available where eye contact can occur.
- Personal Protective Equipment:** Personal protective equipment (PPE) selections vary based on the potential exposure conditions such as handling practices, concentration and ventilation. At a minimum safety glasses and skin protection should be worn. Additional PPE may be required based on specific working conditions.
- Eye Protection:**  Safety glasses equipped with side shields are recommended for minimal protection. Wear goggles if splashing or spraying for added protection in the event splashing or spraying is expected.



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## Hand Protection:



Gloves should be nitrile, neoprene, Viton, polyvinyl alcohol (PVA), or equivalent protection. Use of natural rubber (latex), polyvinyl chloride (PVC) or equivalent material is not recommended.

## Skin Protection:



Uniforms or coveralls should provide adequate protection under normal working conditions. If prolonged contact is unavoidable, wear protective clothing made of polyvinyl alcohol (PVA), neoprene, or nitrile. Remove contaminated clothing and launder before reuse. Heavily contaminate clothing and leather goods should be removed promptly and cleaned or discarded.

## Respiratory Protection:



Use of a NIOSH-approved organic vapor respirator equipped with a dust/mist prefilter should be worn when the concentration of vapor or mist exceeds applicable exposure limits. Respirator selection, use, and maintenance should be in accordance with the requirements of the OSHA Respiratory Protection Standard, 29 CFR 1910.134.

## Occupational Exposure Guidelines:

Substance	Applicable Workplace Exposure Levels	
	ACGIH	OSHA
Petroleum Distillates	TWA: 100 ppm	TWA: 2900 mg/m <sup>3</sup>

## SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

<b>Color:</b>	Clear, colorless	<b>Physical State:</b>	Liquid
<b>Odor:</b>	Mild petroleum hydrocarbon	<b>Vapor Pressure:</b>	0.4 mmHg @ 68° F (20° C)
<b>pH:</b>	NA	<b>Vapor Density:</b>	5 (Air = 1)
<b>Boiling Point:</b>	310° F (155° C)	<b>Solubility:</b>	Insoluble in water
<b>Freezing Point:</b>	- 45° F (-43° C)	<b>Specific Gravity:</b>	0.77 – 0.80 g/ml (H <sub>2</sub> O = 1)
<b>Flash Point:</b>	105° F (40° C)	<b>Odor Threshold:</b>	30 ppm (Stoddard Solvent)

## SECTION 10: STABILITY AND REACTIVITY

<b>Chemical Stability:</b>	Stable under normal temperatures and pressures.
<b>Hazardous Polymerization:</b>	Not expected to occur.
<b>Conditions to Avoid:</b>	Keep away from extreme heat, sparks, open flames, and strong oxidizers.
<b>Incompatibility with Other Materials:</b>	May react with strong acids, reactive metals, reactive halogens, or strong oxidizing agents such as chlorates, nitrates, peroxides, etc.
<b>Hazardous Decomposition Products:</b>	No additional hazardous decomposition products other than those identified in Section 5 of this MSDS.



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## SECTION 11: TOXICOLOGICAL INFORMATION

### Acute Symptoms of Exposure:

- Inhalation:** High concentrations of aerosol or mist may be generated at high temperatures and may be irritating to the respiratory tract, including nose and throat, and may cause difficulty breathing. This may be particularly true with people who have a high level of sensitivity and allergic reactions.
- Ingestion:** May cause mild irritation of the digestive tract, including cramping, diarrhea, nausea, and vomiting. Aspiration into the lungs – by initial ingestion or vomiting – may cause mild to severe pulmonary injury.
- Skin:** Prolongs and/or repeated exposure may cause mild skin irritation, including redness, burning, temporary drying/cracking, and acute dermatitis. Contact with hot material may cause burns.
- Eyes:** Contact may cause slight to moderate irritation, including burning, redness, and tearing. Contact with hot oil may cause thermal burns.

### Chronic Symptoms of Exposure:

- Inhalation:** Exposure to high levels of solvent mist concentration may lead to chronic pulmonary conditions such as chronic bronchitis, pneumonia, and emphysema.
- Skin:** Cracking, drying, and chronic dermatitis.

## SECTION 12: ECOLOGICAL INFORMATION

This material may be harmful to human, animal, and aquatic life if spilled on soil or in water. Petroleum products can be harmful or fatal to aquatic life and waterfowl. Petroleum based solvents are persistent and do not readily biodegrade.

## SECTION 13: DISPOSAL CONSIDERATIONS

Disposal of collected material must comply with federal, state and local regulations. The material, if spilled or discarded may be a regulated waste. Refer to federal, state and local regulations for regulated waste transport and disposal. The responsibility for proper waste disposal lies with the owner of the waste. Contact your ESI representative regarding proper recycling or disposal.



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## SECTION 14: TRANSPORTATION INFORMATION

**US DOT Status:** **Bulk Packages (>119 Gallons)**  
**Shipping Name:** Combustible Liquid, N.O.S. (Petroleum Naphtha)  
**UN/NA #:** NA1993  
**Hazard Class:** Combustible Liquid  
**Packing Group:** III  
**Required Placards:** Class 3, NA1993

**Non-bulk Packages (<119 Gallons)**  
**Shipping Names:** Cleaning compounds (Petroleum Naphtha)  
**UN/NA#:** None – Not DOT Regulated  
**Hazard Class:** None  
**Packing Group:** None  
**Required Labels(s):** None

## SECTION 15: REGULATORY INFORMATION

**TSCA Inventory** Components of this material are exempt from the requirements of the Toxic Substances Control Act Inventory.

**SARA 302/304 Emergency Planning and Notification** The Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires facilities subject to Subparts 302 and 304 to submit emergency planning and notification information based on Threshold Planning Quantities (TPQs) and Reportable Quantities (RQs) for “Extremely Hazardous Substances” listed in 40 CFR 302.4 and 40 CFR 355.  
There are no components in this product on the SARA 302 list.

**SARA 311/312 Hazard Identification** The Superfund Amendments and Reauthorization Act of 1986 (SARA) Title III requires facilities subject to Subparts 311 and 312 to submit aggregate information on chemical by “Hazard Category” as defined in 40 CFR 370.2. This material would be classified under the following hazard categories:

Immediate Acute Health Effects:	Yes
Delayed (Chronic) Health Effects:	Yes
Fire Hazard:	Yes
Sudden Release of Pressure Hazard:	No
Reactivity Hazard:	No

**SARA 313 Toxic Chemical Notification and Release Reporting** This product contains no constituents listed in 40 CFR 372 and therefore is not subject to the requirements of Section 313 of SARA.



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## CERCLA

The Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA) requires notification of the National Response Center concerning release of quantities of "hazardous substances" equal to or greater than the reportable quantities (RQs) including petroleum, including crude oil or any fraction thereof which is not otherwise specifically designated in 40 CFR 302.4.

Chemical substances that may present in this product are not subject to CERCLA.

## Clean Water Act (CWA)

This material is classified as an oil under Section 311 of the Clean Water Act (CWA) and the Oil Pollution Act of 1990 (OPA). Discharges or spill which produce a visible sheen on waters of the United States, their adjoining shorelines, or into conduits leading to surface waters must be reported to the EPA's National Response Center at (800) 424 – 8802.

## SECTION 16: OTHER INFORMATION

**NFPA Ratings:** Health: 1 Flammability: 2 Reactivity: 0

**HMIS Ratings:** Health: 1 Flammability: 2 Reactivity: 0

0 – Least, 1 – Slight, 2 – Moderate, 3 – High, 4 – Extreme

These values are obtained using the guidelines or published evaluations by the National Fire Protection Association (NFPA) of the National Paint and Coating Association (for HMIS ratings).

**LABEL RECOMMENDATION:** RC105 SOLVENT

**NOTICE:** The information herein is based on data considered to be accurate at date of preparation. No warranty is made as to the accuracy or completeness of the foregoing data and safety information. No responsibility can be assumed by vendor for any damage or injury resulting from abnormal use or from any failure to adhere to recommended practices, or from any hazards inherent in the nature of the product.