



# Material Safety Data Sheet

## Section 1. Chemical Product and Company Identification

<b>Product/Trade Name</b>	<b>SYLVATAC® RE 5</b> <i>(formerly SYLVATAC® RE 5N)</i>	<b>Code</b>	Not available.
		<b>MSDS#</b>	6759
		<b>Validation Date</b>	05/30/2001
<b>Supplier / Manufacturer</b>	Arizona Chemical P.O. Box 550850 Jacksonville, FL 32255-0850 USA (800) 526-5294 / (904) 928-8700	<b>Print Date</b>	05/31/2001
<b>Chemical Name</b>	Modified Rosin Ester	<b>EMERGENCY PHONE</b> CHEMTREC: 1-800-424-9300 (transportation and medical)	

## Section 2. Composition and Information on Ingredients

Name	CAS #	% by Weight
1) Modified Rosin Ester	Proprietary NJTSRN-6759	100

See Section 8 for Exposure Controls/ Exposure Limits/ Personal Protection information.

## Section 3. Hazards Identification

### EMERGENCY OVERVIEW

Product is a viscous, liquid with a slight rosin odor. After prolonged contact with highly porous materials, this product may spontaneously combust. May cause eye irritation. Inhalation of vapors/fumes generated by heating this product may cause respiratory irritation with throat discomfort, coughing, or difficulty breathing.

### HMIS

**HEALTH:**  1  
**FIRE:**  1  
**REACTIVITY:**  0  
**PPE:** see Section 8 of this MSDS.

0=Minimal; 1=Slight; 2=Moderate;  
3=Serious; 4=Severe;  
(\* )=Chronic health hazard.

### Potential Health Effects

<b>Eye Contact</b>	Product may cause eye irritation. Symptoms may include irritation, redness, and tearing. Vapors may also cause eye irritation. If heated product contacts the eye, thermal burns may result.
<b>Skin Contact</b>	Prolonged or repeated skin contact may cause skin irritation. When it is heated, this product may cause thermal burns.
<b>Inhalation</b>	Inhalation of vapors/fumes generated by heating this product may cause respiratory irritation with throat discomfort, coughing and difficulty breathing.
<b>Ingestion</b>	Ingestion may produce gastrointestinal irritation and disturbances.

## Section 4. First Aid Measures

<b>Eye Contact</b>	Immediately flush eyes with flooding amounts of cool, low pressure water for at least 15 minutes. If irritation persists, get medical attention. If hot/molten product contacts eye, flush with water for at least 15 minutes and seek medical attention immediately.
<b>Skin Contact</b>	In case of skin contact, wash immediately with soap and water. If irritation develops or persists, get medical attention. If hot/molten product contacts skin, cool under running water. Do not attempt to remove the hot/molten or cooled product from the skin. Seek medical attention.
<b>Inhalation</b>	Move person to non-contaminated air. If affected person is not breathing, apply artificial respiration. Seek medical attention.
<b>Ingestion</b>	If swallowed, contact a physician or poison control center immediately. DO NOT induce vomiting unless directed to do so by medical personnel.

**Notes to Physician**

Provide general supportive measures and treat symptomatically. In case of ingestion, the decision of whether or not to induce vomiting should be made by the attending physician. If burn is present, treat as any thermal burn. Removing adhered product from burned skin may compromise the skin integrity and result in infection and/or more severe scarring.

**\*\*\*If victims of chemical over-exposure are taken for medical attention, give a copy of the label or MSDS to the physician/health professional.\*\*\***

**Section 5. Fire and Explosion Data**

**Flammability of the Product** Nonflammable.

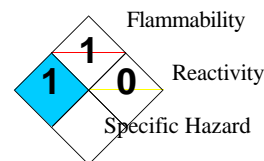
**Auto-Ignition Temperature** Not available.

**Flash Point** CLOSED CUP: 202.22°C (396°F).  
(Setaflash)

**Flammable Limits** Not available.

**NFPA 704**

0=Minimal; 1=Slight;  
2=Moderate; 3=Serious;  
4=Severe



This information is for people trained in the National Fire Protection Association's (NFPA 704) Identification of the Fire Hazards of Materials.

**General Fire Hazards** Product is not considered combustible. If heated above its flash point in the presence of air, product can support combustion.

**Hazardous Decomposition Products** Smoke, carbon monoxide, carbon dioxide, and other products of combustion.

**Extinguishing Media** Carbon dioxide, dry chemical or water.

**Fire Fighting Equipment and Instructions** Wear full protective clothing, including self-contained positive pressure/pressure demand breathing apparatus, helmet, and protective clothing. Use water spray to cool fire-exposed containers and to protect personnel.

**Section 6. Accidental Release Measures**

**Containment** Contain the discharged material.

**Clean-up Procedures** Wear appropriate protective equipment and clothing during clean-up. Attempt to reclaim free product, if this is possible. Follow all Local, State, Federal, and Provincial regulations for disposal.

**Evacuation Procedures** Persons not wearing appropriate protective equipment should be excluded from area of spill until clean-up has been completed.

**Special Instructions** Avoid contact with skin and eyes. Avoid inhalation of fumes from molten product.

**Section 7. Handling and Storage**

**Handling** Avoid eye and skin contact. Avoid breathing fumes if product is used at high temperatures. Maintain good housekeeping. Do not chisel drums in areas where flammable liquids are stored or used. Wash thoroughly after handling. Never eat, drink, or smoke in work areas. Practice good personal hygiene after using this material, especially before eating, drinking, smoking, using the toilet or applying cosmetics.

**Storage** Store at ambient temperature and atmospheric pressure. Suggest stainless steel construction for bulk storage.

**Section 8. Exposure Controls/Personal Protection**

**Engineering Controls** Provide local exhaust and general ventilation systems to maintain airborne concentrations below OSHA, ACGIH, and manufacturer recommended exposure limits. Local exhaust ventilation is preferred because it prevents contaminant dispersion into work areas by controlling it at its source. Local exhaust ventilation is recommended when generating excessive levels of airborne dust or vapors from handling or thermal processing. Use electrically grounded, explosion-proof equipment for ventilation or any handling of this product.

**Personal Protection**

**Eye/Face:** Wear chemical goggles and face shield if handling molten material. Ensure compliance with OSHA's personal protective equipment (PPE) standard for eye and face protection, 29 CFR 1910.133.

<b>Skin:</b>	Use impervious gloves. Work clothing sufficient to prevent all skin contact should be worn, such as coveralls and long sleeves. For heated/molten product, use any type of thermal insulating gloves and other clothing as necessary to protect from thermal burns. Ensure compliance with OSHA's personal protective equipment (PPE) standard, 29 CFR 1910.132 (general) and 138 (hand protection).
<b>Respiratory:</b>	Respirators should be selected by and used under the direction of a trained health and safety professional following requirements found in OSHA's respirator standard (29 CFR 1910.134) and ANSI's standard for respiratory protection (Z88.2-1992). A written respiratory protection program, including provisions for medical certification, training, fit testing, exposure assessments, maintenance, inspection, cleaning, and convenient, sanitary storage, must be implemented.  DUST/MIST: If concentrations are below the TLV and/or PEL, a NIOSH approved disposable dust/mist respirator may be used for personal comfort. For concentrations above the TLV and/or PEL but less than 10 times these limits, a NIOSH approved half-face piece respirator equipped with dust-mist cartridges may be used. For concentrations greater than 10 times the TLV and/or PEL, consult the NIOSH respirator decision logic found in Publication No. 87-116 or ANSI Z88.2-1992. Note: ANSI Z88.2-1992 requires the use of a HEPA filter if the particle size distribution of the contaminant is unknown. Warning! Air-purifying respirators do not protect workers in oxygen-deficient atmospheres.  For molten/heated product: GAS/VAPOR: For concentrations above the TLV and/or PEL but less than 10 times these limits, a NIOSH approved half-face piece respirator equipped with appropriate chemical cartridges may be used. For concentrations greater than 10 times the TLV and/or PEL, consult the NIOSH respirator decision logic found in Publication No. 87-116 or ANSI Z88.2-1992. Warning! Air-purifying respirators do not protect workers in oxygen deficient atmospheres.
<b>General:</b>	Launder contaminated clothing before reuse. Eye wash fountains and emergency showers are recommended. Use good industrial hygiene practices in handling this material.

Chemical Name or Product Name	CAS #	OSHA PEL	ACGIH TLV
1) Modified Rosin Ester	Proprietary NJTSRN-6759	Not established	Not established

*NOTE: The 1989 OSHA PELs were vacated in 1993 and are not currently enforceable by Federal OSHA. However, some state OSHA programs may still enforce the 1989 limits.*

## Section 9. Physical and Chemical Properties

<b>Physical state and appearance</b>	Liquid.	<b>Vapor Density</b>	Not determined.
<b>Odor</b>	Rosin. (Slight.)	<b>Percent Volatile (EPA Method 24)</b>	0.4%
<b>Color</b>	Not available.	<b>Solubility (water)</b>	Negligible
<b>Molecular Weight</b>	Not applicable.	<b>Density (vs. water)</b>	Not available.
<b>Specific Gravity</b>	>1 (Water = 1)	<b>Flash Point</b>	CLOSED CUP: 202.22°C (396°F). (Setaflash)
<b>Boiling Point</b>	>148.89°C (300°F)	<b>R/B Softening Point</b>	5°C (nominal).
<b>pH</b>	Not available.	<b>Acid No. (per ASTM D-465)</b>	60 - 66

## Section 10. Stability and Reactivity Data

<b>Chemical Stability</b>	The product is stable.
<b>Conditions to avoid</b>	Avoid strong oxidizing agents.
<b>Incompatibility</b>	May react with strong oxidizing agents.
<b>Hazardous Decomposition Products</b>	Upon decomposition, product emits carbon monoxide, carbon dioxide and low/or molecular weight hydrocarbons.
<b>Hazardous Polymerization</b>	Hazardous polymerization will not occur.

**Section 11. Toxicological Information**

<b>Toxicity to Animals</b>	Information on this product is not available. Information on a similar product is provided:  ORAL, rat, LD50 = > 5000 mg/kg when administered as a 75% w/w solution in corn oil; DERMAL, rat, LD50 = > 5000 mg/kg.  Similar product was non-mutagenic in the Ames Salmonella and E coli Assays. A similar product was found to produce mild eye and skin irritation in rabbits.
<b>Toxicity to Humans</b>	Contact may cause skin or eye irritation. Ingestion may cause nausea, vomiting, and diarrhea. Inhalation of dust may cause respiratory irritation.  Prolonged or repeated exposure to vapors/fumes generated by heating this product may cause respiratory irritation with throat discomfort, coughing or breathing difficulty.  <b>CARCINOGENIC EFFECTS:</b> None of this product's components are listed as carcinogens by ACGIH, IARC, NIOSH, NTP or OSHA. <b>MUTAGENIC EFFECTS:</b> Not available. <b>TERATOGENIC EFFECTS:</b> Not available. No information is available on the toxicity of this product to the reproductive system.

**Section 12. Ecological Information**

<b>Ecotoxicity</b>	Not available.
<b>Environmental Fate</b>	No information is available.

**Section 13. Disposal Considerations**

<b>Waste Disposal</b>	Wastes must be tested using methods described in 40 CFR 261 to determine if it meets applicable definitions of hazardous waste. No EPA Waste Numbers are applicable for this product's components. Dispose of waste material according to Local, State, Federal, and Provincial Environmental Regulations. Write to the address listed in Section 1 for information on heavy metals analysis and other disposal information.
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**Section 14. Transport Information**

<b>DOT Classification</b>	Not a DOT controlled material (United States).
<b>Proper Shipping Name</b>	None.
<b>DOT Identification Number</b>	None.
<b>Packing Group</b>	None.
<b>Hazardous Substances Reportable Quantity</b>	Not available.
<b>Special Provisions for Transport</b>	IF SHIPPED OVER 100°C (but less than product flash point): DOT Shipping Name: Elevated temperature liquid, n.o.s.; Hazard Class: 9; UN/NA Number: UN3257; Packing group III (bulk shipping requires "HOT" placard).
<b>Additional Shipping Information</b>	Not Determined
<b>International Transportation Regulations</b>	Not Determined

**Section 15. Regulatory Information**

<b>Federal and State Regulations</b>	OSHA: Not hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200).  SARA TITLE III: SARA Section 302 (40 CFR 355 Appendix A): <b>None of this product's components are listed;</b> SARA Section 311/312: <b>None;</b> SARA Section 313 (40 CFR 372.65): <b>None of this product's components are listed;</b> CERCLA (40 CFR 302.4): <b>None of this product's components are listed.</b>
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TSCA Inventory: All of this product's components are listed.

International Inventories: All of this product's components are on or exempt from these inventories: Canada DSL, EINECS, Australia, Japan, and Korea.

State Lists: None of this product's components are listed in CA, FL, MA, MN, NJ, or PA.

This product does not contain any chemicals currently on the California List of Known Carcinogens and Reproductive Toxins.

## Section 16. Other Information

### Key/Legend

ACGIH = American Conference of Governmental Industrial Hygienists. ANSI = American National Standards Institute. ASTM = American Society for Testing and Materials. CERCLA = Comprehensive Environmental Response, Compensation and Liability Act. DOT = Department of Transportation. EPA = Environmental Protection Agency. IARC = International Agency for Research on Cancer. LD = Lethal Dose. NIOSH = National Institute of Occupational Health and Safety. NTP = National Toxicology Program. OSHA = Occupational Safety and Health Administration. PEL = Permissible Exposure Limit. SARA = Superfund Amendments and Reauthorization Act. TLV = Threshold Limit Value. TSCA = Toxic Substance Control Act.

Validated by Richard Moye on 05/30/2001.

Verified by Regulatory Affairs Dept..

Printed 05/31/2001.

**Supersedes Date** 10/11/00 **Reason for Revision** Updated Sections 1 and 2.

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