

MATERIAL SAFETY DATA SHEET



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CHEMTREC 24-HOUR EMERGENCY RESPONSE

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CHEMTREC should only be contacted in the event of chemical emergencies involving a spill, leak, fire, exposure, or accident involving chemicals.

1. PRODUCT IDENTIFICATION

(Produced in Brazil) (PINUS ELLIOTTI)

Product Name	Synonym	CAS Number	EINECS Number	Uses
Brazilian Gum Rosin	Tricyclic	8050-09-7	232-475-7	Varied applications
Resinas Yser YT 101	Monocarboxylic Acids			

Molecular Formula: $C_{20}H_{30}O_2$ Molecular Weight: 302

2. COMPOSITION / INFORMATION ON INGREDIENTS

Hazardous Components	%	OSHA PEL	ACGIH TLV	Other Limits
N/A		N/A	N/A	N/A

3. HAZARDS IDENTIFICATION

Solid resin hazards: No physical / chemical, environmental or human hazards are reported or known. OSHA has listed gum rosin as a "sensitizer" with the warning statement: "reduce exposure to as low as possible." However, there is no set Threshold Limit Value (TLV).

Molten resin hazards: Vapors emitted when the resin is heated can cause respiratory problems. Fumes from hot resin, at high temperatures, can have an irritant effect on eyes.

4. FIRST AID MEASURES OR PROCEDURES

Skin Contact: SOLID RESIN: Rosin is sterile. Wash area with copious amounts of soap & water. MOLTEN RESINS: If molten material comes in contact with the skin, cool under a running stream of water. DO NOT attempt to remove the resin from the skin. Removal could result in severe tissue damage. Get medical attention.

Eye Contact: Remove contact lenses at once. Flush eyes well with large quantities of water at least 15 minutes. See a physician immediately.

Accidental Ingestion: DO NOT induce vomiting. Wash mouth out with water. Drink plenty of water. Any further treatment based on judgement of the physician in response to reactions of the patient.

Inhalation: If symptoms of overexposure are experienced, evacuate to fresh air. If symptoms persist, seek medical attention.

5. FIRE & EXPLOSION HAZARD DATA

NFPA Codes: Health: 0 Fire: 1 Reactivity: 0

(Degree of Hazard: 4=Extreme 3=High 2=Moderate 1=Slight 0=Insignificant)

Flash Point: Above 400°F (COC)

Identification No.: N/A

Extinguishing Media: Water Fog/Spray, Regular Foam, CO₂, Dry Chemical (Class B)

Unsuitable extinguishing media: Unknown

Hazardous thermal decomposition products: Unknown

Flammable Limits (% by volume): Not Available

Special Fire Fighting Procedures and Equipment: As with any fire situation, full face, self-contained breathing apparatus & appropriate clothing should be worn.

Other information: Combustible. Not flammable. Avoid generation of dust.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Do not breath dust. Use dust mask, safety glasses & suitable gloves.

If material is not contaminated, sweep & scoop into clean containers for use. If contaminated, sweep up & scoop into containers for disposal. Resin is not harmful.

7. HANDLING AND STORAGE

Store in sealed containers to preserve quality. Store in closed containers away from heat or sources of ignition and oxidizing materials. Protect against physical damage to containers.

Inventory Control: Use oldest material first.

8. EXPOSURE CONTROLS AND PERSONAL PROTECTION

Carcinogenicity: No **NTP:** N/A **OSHA:** N/A **IARC:** N/A

Signs and Symptoms of Acute and**Chronic Exposure:**

Not toxic. Breathing heavy concentrations of dust or fumes should be avoided. Respirators are indicated for prolonged contact with heavy dust or fume concentrations.

Personal Protection (Solid Resin):

NIOSH-approved respiratory protection device (dust mask), OSHA-approved safety glasses with side shields, and suitable gloves (Neoprene or Rubber).

Personal Protection (Molten Resin):

Mask with an organic vapors filter, safety glasses and leather gloves.

Work/Hygienic Practices:

Good personal hygiene practices should be used. Wash after any contact, before eating, and at the end of the work period.

9. PHYSICAL AND CHEMICAL PROPERTIES

Physical state:	Solid	Color:	Yellow
Boiling point: (100 mm Hg)	>500°F	Odor:	Resin odour
Gardner Color:	5/6 (Typical) WW	Crystallization Time:	More than 4 hours (not reported on Certificates of Analysis)
Softening Point: (Ring & Ball)	74°C - 80°C (Typical)	Acid number: (mgKOH/g)	162 - 165 (Typical)
Vapor Pressure: (@ 317°C)	100mm Hg	Refractive Index: (@ 20°C)	1.54
Solubility in water:	Insoluble	Solubility in other ingredients:	Soluble in aromatic solvents, esters, ketones
Specific gravity: (H ₂ O = 1)	1.07 ± 0.01	Percentage Volatile by Volume (@ 25°C)	0.4% (Typical)

10. STABILITY AND REACTIVITY DATA

Stability:	Stable under ordinary conditions of use & storage.
Conditions to avoid:	Unknown
Materials to avoid:	Avoid contact with strong oxidizing compounds.
Hazardous Decomposition Products:	Thermal degradation produces carbon oxides.
Hazardous Polymerization:	Will not occur.

11. TOXICOLOGICAL INFORMATION

Solid resin at normal temperatures presents no toxicological danger. No values of long term or chronic toxicity are available. Inhalation studies with rats submitted to decomposition fumes of this kind indicate low toxicity. At normal concentration of 1.50-2.00 mg/l of fumes, no deaths occurred after a six-hour exposure period.

12. ECOLOGICAL INFORMATION

The resin is not biodegradable. Thus, special care must be taken not to throw the resin or resin residues into water basins or rivers.

13. DISPOSAL CONSIDERATIONS

Dispose of in accordance with Federal, State and Local environmental regulations. This product does not constitute a hazardous waste problem. Avoid inhalation of dust and contact with skin & eyes. May form Flammable Dust/Air mixtures.

14. TRANSPORT INFORMATION

DOT Hazard Class: Non-hazardous, non-regulated.

15. REGULATORY INFORMATION

The following environmental and regulatory data are provided to assist users of this product in defining their regulatory environmental compliance obligations. Most resins produced from rosin are biologically inert & have a low order of toxicity. The extended use of these materials in printed inks has produced no ill effects from oral or dermal toxicity & meet FDA requirements for use in food packaging & as components of chewing gum, soft drinks, citrus coatings, flavoring compounds, rubber goods & many others.

SARA TITLE III (See footnotes):

SEC. 304 EHS RQ (lbs)	SEC. 302 EHS TPQ (lbs)	SEC. 311/312 Hazard Category	SEC. 313 Toxic Chemical (Yes, No)
N/A	N/A	NHH, NPH	NO

CERCLA (40 CFR 302.4 HAZARDOUS SUBSTANCE & REPORTABLE QUANTITIES):

This product does NOT contain any hazardous substances listed in 40 CFR 302.4.

CALIFORNIA PROP. 65

Resins based on rosin-derived resins are NOT listed on California's Prop. 65 toxic substance list.

RCRA INFORMATION:

This product is not listed in federal hazardous waste regulation 40 CFR 261.33, paragraph (e) or (f), i.e., chemical products that are considered hazardous if they become wastes. It does not exhibit any of the hazardous characteristics listed in 40 CFR 261, Subpart C. State or local hazardous waste regulations may apply if they are different from the federal regulation. This product is not biodegradable.

ODC STATUS:

The components of this product are NOT found to contain any ozone depleting compounds since rosin by definition is non-volatile resinous material and hydrogenation only alters the double-bond system of rosin.

TSCA STATUS:

The components of this product are included on the EPA TSCA Chemical Substance Inventory.

DSL STATUS:

The components of this product are included on Canada's Domestic Substance List.

CANADIAN WHMIS:

The components of this product are classified as a NON-CONTROLLED PRODUCT according to our interpretation of the amendments to the Hazardous Products Acts.

FOOTNOTES:

SEC. 302 — Threshold Planning Quantity, Extremely Hazardous Substance (EHS)
(40 CFR 355 Emergency Planning and Notification regulations)

N/A: This chemical is not an EMS. Therefore, there is no Threshold Planning Quantity (TPQ).

SEC. 304 — Reportable Quantity for Releases of an EMS (40 CFR 355, Appendix A)

N/A: This chemical is not an EMS. Therefore, there is no Reportable Quantity (RQ).

SEC. 311/312 — 40 CFR 370 Hazardous Chemical Reporting Requirements "Hazard Categories"

☛ HC-1 Immediate (acute) health hazard ☛ HC-2 Delayed (chronic) health hazard ☛ HC-3 Fire hazard

☛ HC-4 Sudden release of pressure hazard ☛ HC-5 Reactive hazard ☛ NHH-Not a health hazard

☛ NPH-Not a physical hazard

16. OTHER INFORMATION

The information contained herein is based on data considered to be accurate & reliable. No warranty is expressed or implied regarding the accuracy or correctness of this data. It is the user's obligation to determine the safe use of the product since conditions of use, handling, storage & disposal are beyond our control.