

MATERIAL SAFETY DATA SHEET

1. PRODUCT IDENTIFICATION

Product Name	Synonyms	CAS Number	Use
Gum Rosin (All Grades)	Tricyclic Monocarboxylic Acids, Greek Pitch, Colophony	8050-09-7	Varied applications

1.1 Relevant identified uses of the substance or mixture and uses advised against

Identified uses: Adhesive

Uses advised against: None known.

1.2 Details of the supplier of the safety data sheet

Manufacturer / Supplier

PT. Nasco
Jln. Medan-Binjai Km. 14 No. 61
Deli Serdang, Indonesia

1.3 Emergency telephone number:

For emergency health, safety, environmental and transportation information, call 62-61-8824167

2. HAZARDOUS 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 judgment 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

Flash Point: Above 400°F (COC) **Identification No.:** N/A

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

Flammable Limits: Not Available
(% by volume)

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

NFPA Codes: Health: 0 Fire: 1 Reactivity: 0
(Degree of Hazard: 4=Extreme 3=High 2=Moderate 1=Slight 0=Insignificant)

Unusual Fire & Explosion Hazards: Flammable when finely divided and suspended in air.

CAUTION: Do NOT use crushed gum rosin in "hot-melt" adhesive applications without special precautions.

DOT Hazard Class: Non-hazardous, non-regulated. Class 65 for bags & drums.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions: Do not breathe 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 & CHEMICAL CHARACTERISTICS

Boiling Point: (100 mm Hg)	604°F	Odor:	Rosin odor
Vapor Pressure (@ 317°C)	100mm Hg	Softening Point: (Ring & Ball)	70° C - 80° C
Specific Gravity: (H ₂ O = 1)	1.07 ± 0.01	Refractive Index: (@ 20°C)	1.54
Vapor Density: (Air = 1)	N/A	Evaporation Rate: (Butyl Acetate = 1)	Approx. 0
Solubility in Water:	Negligible	Percentage Volatile by Volume (@ 25°C)	Negligible

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	SEC. 302	SEC. 311/312	SEC. 313
EHS RQ (lbs)	EHS TPQ (lbs)	Hazard Category	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.