

# MATERIAL SAFETY DATA SHEET

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## 1 PRODUCT IDENTIFICATION

<b>PRODUCT NAME</b>	VINSOL® RESIN
<b>CHEMICAL/COMMON NAME</b>	dark rosin
<b>CAS NUMBER</b>	8050-09-7

## 2 COMPOSITION / INFORMATION ON INGREDIENTS

This product is shipped and delivered as an ambient temperature SOLID or HOT MOLTEN liquid. THE HMIS HEALTH HAZARD RATING FOR THE HOT MOLTEN OR HOT LIQUID PRODUCT IS 3 SERIOUS. See MSDS Section 16 for the HMIS health hazard rating for the product at ambient temperature.

When shipped at elevated temperatures and delivered in HOT MOLTEN or HOT LIQUID form, refer to MSDS Sections 3, 4, 5, 7, and 8 for additional hazard information.

When shipped and delivered in SOLID form, this product is considered hazardous according to the OSHA Hazard Communication Standard 29CFR1910.1200 due to flammable dust potential.

If this product is heated or used at temperatures sufficient to produce smoke or fumes, refer to MSDS Section 8, Recommended Exposure Limits and Personal Protective Equipment.

## 3 HAZARDS IDENTIFICATION

### EMERGENCY OVERVIEW

DANGER!

HOT MOLTEN product.

Burns may cause irreversible eye injury and blindness.

Causes skin burns.

Inhalation of smoke or fumes may cause throat discomfort, coughing, or breathing difficulty.

Product may burn if ignited.

WARNING!

SOLID product at ambient temperature: Static charges generated by emptying package in or near flammable vapors may cause flash fire.

May form flammable dust-air mixtures.

May cause eye irritation by mechanical abrasion.

May cause skin irritation by mechanical abrasion.

Inhalation of dust may cause respiratory tract irritation.

May cause allergic skin reaction (sensitization) in susceptible individuals.

### POTENTIAL HEALTH EFFECTS

Prolonged exposure to smoke or fumes generated by heating this product may cause respiratory irritation with throat discomfort, coughing, or breathing difficulty. Repeated exposure may lead to respiratory sensitization (asthma) in susceptible individuals.

Refer to MSDS Section 8, Exposure Controls/Personal Protection, for further information.

Refer to Section 5 for Hazardous Combustion Products, and Section 10 for Hazardous Decomposition/Hazardous Polymerization Products.

<b>PRODUCT NAME</b>	VINSOL® RESIN		
<b>MSDS NUMBER</b>	859 2143 1200	<b>VERSION</b>	14

## 4 FIRST AID MEASURES

### SKIN

HOT MOLTEN product: Immediately cool skin burns with water and cold packs for at least 15 minutes. Do NOT put ice directly on the skin. Do NOT attempt to remove solidified resin from the skin as severe tissue damage may result. Get immediate medical attention. See Note to Physician.

SOLID product at ambient temperature: Wash thoroughly with soap and water. Remove contaminated clothing. Get medical attention if irritation develops or persists. Thoroughly wash clothing before reuse. See Note to Physician.

### EYE

HOT MOLTEN product: Cool burns with plenty of low-pressure water. Get immediate medical attention.

SOLID product at ambient temperature: Remove contact lenses. Hold eyelids apart. Immediately flush eyes with plenty of low-pressure water for at least 15 minutes. Get medical attention if irritation persists.

### INHALATION

Remove to fresh air. Get medical attention if nasal, throat or lung irritation develops. See Note to Physician.

### INGESTION

No adverse health effects are expected from accidental ingestion of small amounts of this product. For ingestion of large amounts: Do NOT induce vomiting. Get immediate medical attention.

### NOTES TO PHYSICIAN

For HOT MOLTEN or HOT LIQUID product: Material should not be forcibly pulled from the skin. Mineral oil may be used to loosen and soften the material.

This product contains rosin or a rosin derivative. Rosin and some of its derivatives have been reported to cause an allergic skin reaction (sensitization) in susceptible individuals after repeated or prolonged skin contact. Smoke or fumes generated by heating product may lead to respiratory sensitization (asthma) in susceptible individuals.

## 5 FIRE FIGHTING MEASURES

### EXTINGUISHING MEDIA

Water spray, dry chemical, foam, carbon dioxide or clean extinguishing agents may be used on fires involving this product.

### FIRE FIGHTING PROCEDURES

Wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH approved (or equivalent) and full protective gear when fighting fires involving this product.

Apply water to HOT MOLTEN or HOT LIQUID resin fires from a safe, protected location to avoid body contact with hot resin.

Cool containers with water to prevent rupture.

### CONDITIONS TO AVOID

None known.

### HAZARDOUS COMBUSTION PRODUCTS

If heated to combustion, the following substances may be formed: carbon monoxide, carbon dioxide, aldehydes, carboxylic acids and smoke

**FLASH POINT** 370 ° F Pinsky-Martin Closed Cup

**AUTOIGNITION TEMPERATURE** 878 ° F

## 6 ACCIDENTAL RELEASE MEASURES

For HOT MOLTEN or HOT LIQUID product: Wear protective equipment as required (see MSDS Section 8).

Contain spilled material and allow it to cool and solidify. Do NOT apply water. After solidification, clean up and place in suitable containers for use or disposal.

For SOLID product: Ventilate area. Avoid dust formation. If product is not contaminated, scoop into clean containers for use. If product is contaminated, scoop into containers, and dispose appropriately. In case of accidental spill or release, refer to Section 8, Personal Protective Equipment and General Hygiene Practices.

## 7 HANDLING & STORAGE

### GENERAL MEASURES

For HOT MOLTEN or HOT LIQUID product: Use personal protective equipment as indicated in Section 8: Exposure Controls/Personal Protection.

For SOLID product: Ground all equipment.

Blanket vessel with inert gas when emptying bags where flammable vapors may be present.

Ground operator and pour material slowly into conductive, grounded chute.

For large bags (1000 lbs or greater) a ground cable MUST be attached to the bag ground connection.

Store in a well-ventilated area at ambient temperatures.

Keep container closed when not in use.

Use oldest material first.

### MATERIALS OR CONDITIONS TO AVOID

Water contact with HOT MOLTEN resin may result in foaming or spattering, which can cause eye or skin burns.

Avoid conditions that generate dust; product may form flammable dust-air mixtures.

Avoid emptying package in or near flammable vapors; static charges may cause flash fire.

Keep away from heat, flame, sparks and other ignition sources.

Spontaneous heating may occur if stored in a non-ventilated area at elevated temperatures.

## 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

### WORK PRACTICES & ENGINEERING CONTROLS

Eyewash fountains and safety showers should be easily accessible.

If user operations generate dust or fumes: Use process enclosures, local exhaust ventilation, or other engineering controls to control airborne levels below recommended exposure limits. Discharge from the ventilation system should comply with applicable air pollution control regulations.

### GENERAL HYGIENIC PRACTICES

Avoid contact with eyes, skin, and clothing.

Avoid breathing dust or fumes.

Handle in areas with adequate ventilation.

Avoid contamination of food, beverages, or smoking materials.

Wash thoroughly after handling, and before eating, drinking or smoking.

Remove contaminated clothing promptly and clean thoroughly before reuse.

### RECOMMENDED EXPOSURE LIMITS

This product may present an inhalation health hazard if used under conditions that could generate dust or fumes.

PARTICULATES (INSOLUBLE) NOT OTHERWISE SPECIFIED (PNOS): If used under conditions that generate particulates, the ACGIH TLV-TWA of 3 mg/m<sup>3</sup> respirable fraction (10 mg/m<sup>3</sup> total) should be observed.

ROSIN PYROLYSIS FUMES: If this product is heated to temperatures sufficient to produce smoke or fumes, maintain exposure to resin acids to the lowest achievable concentration using recommended engineering controls and personal protective equipment.

### PERSONAL PROTECTIVE EQUIPMENT

Safety glasses

Impervious gloves

Appropriate protective clothing

Appropriate respiratory protection is required when exposure to airborne contaminants may exceed acceptable limits. Respirators should be selected and used in accordance with OSHA, Subpart I (29 CFR 1910.134) and manufacturers recommendations.

Personnel exposed to HOT MOLTEN or HOT LIQUID material should wear protective clothing that provides protection against thermal burns. Required Protective Equipment: a) Longsleeved protective shirt, long pants, and work shoes; b) Hard hat and face shield; c) Long-cuff gloves (Gauntlet type-extending beyond the wrist); d) Lined rainsuit with protective hood or shoulder shroud or e) Full aluminized or thermal suit with hood.

### PROTECTIVE MEASURES DURING REPAIR AND MAINTENANCE

Eliminate ignition sources and prevent build-up of static electrical charges.

Completely isolate and thoroughly clean all equipment, piping, or vessels before beginning maintenance or repairs.

Keep area clean. Product will burn.

## 9 PHYSICAL & CHEMICAL PROPERTIES

<b>PHYSICAL STATE:</b>	hot molten liquid, solid, flake or powder
<b>COLOR:</b>	dark brown
<b>ODOR:</b>	pine
<b>Boiling Point</b>	> 572 ° F
<b>Specific Gravity</b>	1.3227
<b>Percent Volatile</b>	negligible at 68° F
<b>Solubility In Water</b>	130 mg/L
<b>Softening Point</b>	217 - 253 ° F

## 10 STABILITY & REACTIVITY

### HAZARDOUS DECOMPOSITION PRODUCTS

None known.

### HAZARDOUS POLYMERIZATION

Not anticipated under normal or recommended handling and storage conditions.

### GENERAL STABILITY CONSIDERATIONS

Stable under recommended handling and storage conditions.

### INCOMPATIBLE MATERIALS

None known

## 11 TOXICOLOGICAL INFORMATION

### CARCINOGENICITY INFORMATION

Not listed as a carcinogen by NTP. Not regulated as a carcinogen by OSHA. Not evaluated by IARC.

### REPORTED HUMAN EFFECTS

Due to the physical nature of this material, may cause eye, skin and respiratory irritation. This product contains rosin or a rosin derivative. Rosin and some rosin derivatives have been reported to cause an allergic skin reaction (sensitization) in susceptible individuals after repeated or prolonged contact. Smoke or fumes generated by heating may lead to respiratory sensitization (asthma) in susceptible individuals.

### REPORTED ANIMAL EFFECTS

PRODUCT/SIMILAR PRODUCT - Acute oral LD50 (rat): > 4.0 g/kg; (mouse): > 3.0 g/kg; (guinea pig): > 2.5 g/kg. Acute dermal LD50 (rabbit): > 2.5 g/kg. Ninety-day oral subacute no effect level (rat): NOEL = 0.2-1.0% in diet. Signs of toxicity included refusal to eat, weight loss and death at highest level, depressed weight gain and liver enlargement. Two-year chronic oral no effect level (rat, dog): NOEL = 0.05% in diet. Signs of toxicity included temporary weight depression and liver enlargement in both species.

### MUTAGENICITY/GENOTOXICITY INFORMATION

No mutagenicity studies have been carried out with this product.

## 12 ECOLOGICAL INFORMATION

### AQUATIC TOXICITY

Acute 96-hour LL50 (Fathead minnow): > 1000 mg/l. Acute 48-hour EL50 (Daphnia magna): 911 mg/l. NOEL: 750 mg/l. Algae growth inhibition test (72-hour EL50): > 1000 mg/l.

### BIODEGRADABILITY

Based upon data from this or similar materials, this product cannot be regarded as readily biodegradable; however, it may be slowly biodegradable.

## 13 DISPOSAL CONSIDERATIONS

### WASTE DISPOSAL

For SOLID and HOT MOLTEN product that has been cooled and solidified: Landfilling in a permitted solid or hazardous waste facility is recommended. Handling, transportation, and disposal of material should be conducted in a manner to prevent a nuisance dust hazard. Fully containerize the material before handling, and protect from exposure to the outdoors. Ensure there are no restrictions on disposing of bulk or semi-bulk quantities of waste material. Disposal should be in accordance with all Federal, State and local regulations.

## 14 TRANSPORT INFORMATION

### GENERAL

HOT MOLTEN or HOT LIQUID product: This product is subject to the hazardous materials regulations. For specific information regarding transportation of this product, please contact the Hercules representative at (905) 279-3338.

SOLID at ambient temperature: This product is not subject to DOT regulations. For specific information regarding transportation of this product, please call the Hercules representative at (905) 279-3338.

## 15 REGULATORY INFORMATION

### CHEMICAL INVENTORIES

U.S. TSCA: The components of this product are included on the TSCA Inventory.

European EINECS : Included on EINECS list.

Canadian CEPA : Included on DSL Inventory.

Korean KECL : Included on KECL Inventory.

### SARA TITLE III - SECTIONS 302/304

This product is not an Extremely Hazardous Substance subject to reporting under 40CFR355.

### SARA TITLE III - SECTIONS 311 AND 312

HC-1: Acute health hazard

HC-3: Fire hazard

### SARA TITLE III - SECTION 313

This product does not contain any chemicals subject to reporting under Section 313 of Title III of the Superfund Amendments and Reauthorization Act and 40CFR372.

### CERCLA

This product does not contain any chemicals subject to reporting as a CERCLA Hazardous Substance under 40CFR302.4.

### RCRA

This product is not a hazardous waste as listed in 40CFR261.33. It does not exhibit any of the hazardous characteristics listed in 40CFR261, Subpart C. State or local hazardous waste regulations may apply if they are different from the federal regulations.

## 16 OTHER INFORMATION

### HMIS RATINGS:

<b>Health</b>	0	Minimal Hazard
<b>Flammability</b>	1	Slight Hazard
<b>Reactivity</b>	0	Minimal Hazard

