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VINSOL* Dark resin
MSDS No.: 859 2143 1200-04

Supersedes MSDS #: 859 2143 1200-03

Date: 09/02/94

I. PRODUCT IDENTIFICATION

WARNING! STATIC CHARGES GENERATED BY EMPTYING PACKAGE IN OR NEAR FLAMMABLE VAPORS MAY CAUSE FLASH FIRE.
MAY FORM FLAMMABLE DUST-AIR MIXTURES.
(FOR BAGS 1000 LBS. OR GREATER, SEE SECTION VII FOR ADDITIONAL HAZARDS).

VINSOL* Dark resin

HMIS RATINGS:(1)

CASRN: 8050-09-7

Health hazard: 0 Minimal
Flammability hazard: 1 Slight
Reactivity hazard: 0 Minimal

CHEMICAL & COMMON NAME: Dark rosin

APPEARANCE AND ODOR: Dark brown solid, flake, or powder; odor characteristic of pine-derived resin

* Registered Trademark of Hercules Incorporated

(1)Explanation of acronyms:

HMIS: Hazardous Materials Identification System rating for product as supplied.

CASRN: Chemical Abstracts Service Registry Number

AIHA WEEL: American Industrial Hygienists Association - Workplace Environmental Exposure Level.

OSHA: Occupational Safety and Health Administration.

TLV: Registered trademark of American Conference of Governmental Industrial Hygienists for Threshold Limit Values.

TWA: Time Weighted Average

STEL: Short term exposure limit (See 29 CFR 1910.1048, March 1, 1989, revision)

C: Ceiling exposure concentration (See 29 CFR 1910.1000, March 1, 1989, rev.)

SKIN: May be absorbed through skin (See 29 CFR 1910.1048, March 1, 1989, rev.)

N/A: Not applicable

MARKETED BY

HARWICK STANDARD
DISTRIBUTION CORPORATION
60 S. Seiberling Street • Akron, Ohio 44305

 II. HAZARDOUS INGREDIENTS & EXPOSURE LIMITS

As Hercules interprets the U. S. Occupational Safety and Health Act and Regulations, including the Hazard Communication Standard 29 CFR 1910.1200 dated August 24, 1987, this product should NOT be considered a health hazard.

If this product is used in a manner that could generate particulates (dust), Hercules recommends that the dust be treated as a NUISANCE PARTICULATE (Particulates Not Otherwise Classified) as defined by the American Conference of Governmental Industrial Hygienists (ACGIH) or (Particulates not otherwise Regulated) as defined by OSHA.

RECOMMENDED AIRBORNE LEVELS

1993-1994

OSHA TWA

TLV-TWA

Particulates not	15 mg/m ³ total	10 mg/m ³
Otherwise classified/regulated	5 mg/m ³ respirable fraction	

If this product is heated to temperatures sufficient to produce smoke or fumes, the TLV-TWA of 0.1 mg/m³ (as formaldehyde), for rosin core solder pyrolysis products should be observed.

 III. TYPICAL PHYSICAL & CHEMICAL CHARACTERISTICS

BOILING POINT: N/A	SOLUBILITY IN WATER: Negligible
VAPOR PRESSURE AT 20 C: Not determined	SPECIFIC GRAVITY: 1.22
VAPOR DENSITY: N/A	pH: N/A
VOLATILE (WT. %): Negligible at 20 C	EVAPORATION RATE: N/A
SOFTENING POINT: 103-123 C (217-253 F)	

 IV. FIRE, EXPLOSION, & REACTIVITY HAZARD DATA

WARNING! STATIC CHARGES GENERATED BY EMPTYING PACKAGE IN OR NEAR FLAMMABLE VAPORS MAY CAUSE FLASH FIRE.
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FLASH POINT: 280 C (536 F) Pensky-Martens

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IV. FIRE, EXPLOSION, & REACTIVITY HAZARD DATA

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FLAMMABLE LIMITS: Not determined

AUTOIGNITION TEMPERATURE: 470 C (878 F)

EXTINGUISHING MEDIA: Water spray, dry chemical, foam, carbon dioxide or halon

SPECIAL FIREFIGHTING PROCEDURES: Use self-contained breathing apparatus.

UNUSUAL FIRE & EXPLOSION HAZARDS: May form flammable dust-air mixtures.

STABILITY CONSIDERATIONS:

Stable. Conditions to Avoid: Spontaneous heating may occur if stored in a non-ventilated area at elevated temperatures.

INCOMPATIBILITY WITH: None

HAZARDOUS DECOMPOSITION PRODUCTS: None

HAZARDOUS PRODUCTS OF COMBUSTION:

Carbon monoxide, carbon dioxide and smoke. Depending on conditions, some aliphatic aldehydes and carboxylic acids also may be formed.

HAZARDOUS POLYMERIZATION: Will not occur.

V. HEALTH HAZARD DATA

SIGNS & SYMPTOMS OF OVEREXPOSURE IN THE WORKPLACE:

EYES: Dust may cause irritation by mechanical abrasion.
SKIN: Prolonged and repeated contact may cause a skin sensitization reaction in susceptible individuals (See below: Medical conditions generally recognized as being aggravated by exposure).
INHALATION: Inhaling dust may cause respiratory irritation (cough).
INGESTION: None known.

EMERGENCY & FIRST AID PROCEDURES:

EYES: In case of contact, immediately flush with plenty of low-pressure water for at least 15 minutes. Remove any contact lenses to ensure thorough flushing. Call a physician.

SKIN: Wash with soap and running water.

INHALATION: Remove to fresh air.

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V. HEALTH HAZARD DATA

EMERGENCY & FIRST AID PROCEDURES...Continued

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.

NOTE TO PHYSICIAN: Material should not be forcibly pulled from the skin. Mineral oil may be used to loosen the material.

MEDICAL CONDITIONS GENERALLY RECOGNIZED AS BEING AGGRAVATED BY EXPOSURE:

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. Hercules Incorporated is unaware of any allergic skin reactions caused by industrial exposure to this product or similar materials. A thorough search of Hercules medical records has disclosed no case of skin sensitization to rosin or its derivatives from industrial exposure in our workers. None have been reported by our customers.

PRIMARY ROUTE OF ENTRY: Eyes, skin

CANCER INFORMATION:

Not listed as a carcinogen by NTP (National Toxicology Program); not regulated as a carcinogen by OSHA (Occupational Safety and Health Administration); not evaluated by IARC (International Agency for Research on Cancer).

REPORTED HUMAN 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). See SECTION II.

REPORTED ANIMAL EFFECTS

Mild eye irritant. Low order of toxicity in acute, subacute and chronic peroral studies.

VI. SPILL PROCEDURES & WASTE DISPOSAL

SPILL PROCEDURES:

If material is not contaminated, scoop into clean containers for use. If contaminated, scoop into containers for disposal.

WASTE DISPOSAL METHOD:

Incineration of waste material in a permitted facility in accordance to local, state, and federal regulations is the recommended disposal method. Landfilling in a licensed facility is a suitable alternative.

Refer to Section VIII for specific Federal Environmental and Regulatory Data regarding use or disposal of this product.

VII. APPLICABLE CONTROL MEASURES

APPROPRIATE HYGIENIC PRACTICES:

Do not allow eye or skin contact.
Avoid breathing dust or vapor.
Avoid contamination of food, beverages, or smoking materials.
Wash thoroughly after handling, and before eating, drinking or smoking.

PERSONAL PROTECTIVE EQUIPMENT:

Impervious gloves
Safety glasses
Appropriate respiratory protection is required when exposure to an airborne contaminant is likely to exceed acceptable limits. Respirators should be selected and used in accordance with OSHA, Subpart I (29 CFR 1910.134) and manufacturer's recommendations.
Personnel exposed to hot molten material should wear protective clothing that provides protection from thermal burns. Full face shield, lined rain suit (or other heat resistant material), and lined impervious gloves are recommended.

WORK PRACTICES:

Eyewash fountains and safety showers should be easily accessible.

HANDLING AND STORAGE PRECAUTIONS:

For small packages, the following warning applies:
WARNING! STATIC CHARGES GENERATED BY EMPTYING PACKAGE IN OR NEAR FLAMMABLE VAPORS MAY CAUSE FLASH FIRE. MAY FORM FLAMMABLE DUST-AIR MIXTURES. Avoid ignition sources such as sparks and flame. Ground all equipment. In addition, when emptying bags where flammable vapors may be present, blanket vessel with inert gas, ground operator, and pour material slowly into conductive, grounded chute.

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VII. APPLICABLE CONTROL MEASURES

HANDLING AND STORAGE PRECAUTIONS...Continued

For large bags (1,000 lbs. or greater), the following warning applies:
WARNING! STATIC CHARGES GENERATED BY EMPTYING PACKAGE MAY IGNITE FLAMMABLE VAPORS OR DUST-AIR MIXTURES. MAY FORM FLAMMABLE DUST-AIR MIXTURES. Avoid ignition sources such as sparks and flame. Ground all equipment and the bag. In addition, when emptying where flammable vapors may be present, blanket vessel with an inert gas. **ATTENTION! A GROUNDING CABLE MUST BE ATTACHED TO THE BAG GROUND CONNECTION!**

Flaked forms are prone to gradual oxidation. Control inventory. Use oldest material first.

ENGINEERING CONTROLS:

Adequate ventilation should be provided to keep dust or vapor concentrations below acceptable exposure limits. Discharge from the ventilation system should comply with applicable air pollution control regulations.

PROTECTIVE MEASURES DURING REPAIR AND MAINTENANCE:

Eliminate sources of ignition.

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

Keep area clean. Product will burn.

 VIII. ENVIRONMENTAL & REGULATORY DATA

The following environmental and regulatory data are provided to assist users of this product in defining their regulatory environmental compliance obligations.

A. PRODUCT COMPOSITION

PRODUCT (P) or COMPONENT NO.	TRADE NAME or CHEMICAL COMPONENT	CASRN	WT. PERCENT
P	VINSOL* Dark resin	8050-09-7	100

B. SARA TITLE III (See footnotes)

COMPONENT NO.	SEC. 304	SEC. 302	SEC. 311/312 HAZARD CATEGORY	SEC. 313 TOXIC CHEMICAL (YES, NO)
	EHS RQ (lbs)	EHS TPQ (lbs)		
P	N/A	N/A	NHH, HC-3 (dust)	NO

C. CERCLA (40 CFR 302.4 HAZARDOUS SUBSTANCE & REPORTABLE QUANTITIES)

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

D. 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.

E. TSCA STATUS

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

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VIII. ENVIRONMENTAL REGULATORY DATA

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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 EHS. Therefore, there is no Threshold Planning Quantity (TPQ).

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

N/A: This chemical is not an EHS. 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

SEC. 313 - 40 CFR 372 Toxic Chemical Release Reporting Requirements

NO: This component is NOT subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372 Toxic Chemical Reporting requirements.

YES: This component is subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372 Toxic Chemical Reporting requirements. Percent composition (or estimated range) is listed above.

N/A: This product is a mixture. As such, it is not listed as a Toxic Chemical under 40 CFR 372, Sect. 313 reporting requirements. Reportable constituents are listed individually where they exceed threshold concentration limits.

HERCULES INCORPORATED HAS COMPILED THE INFORMATION AND RECOMMENDATIONS CONTAINED IN THIS MATERIAL SAFETY DATA SHEET FROM SOURCES BELIEVED TO BE RELIABLE AND TO REPRESENT THE MOST REASONABLE CURRENT OPINION ON THE SUBJECT WHEN THE MSDS WAS PREPARED. NO WARRANTY, GUARANTY OR REPRESENTATION IS MADE AS TO THE CORRECTNESS OR SUFFICIENCY OF THE INFORMATION. THE USER OF THIS PRODUCT MUST DECIDE WHAT SAFETY MEASURES ARE NECESSARY TO SAFELY USE THIS PRODUCT, EITHER ALONE OR IN COMBINATION WITH OTHER PRODUCTS, AND DETERMINE ITS ENVIRONMENTAL REGULATORY COMPLIANCE OBLIGATIONS UNDER ANY APPLICABLE FEDERAL OR STATE LAWS.