

MALIEC ANHYDRIDE RESIN

1 IDENTIFICATION OF THE PRODUCT AND THE COMPANY

1.1 IDENTIFICATION OF THE SUBSTANCE / PREPARATION:

Commercial Name: Rosin Modified Maleic Anhydriade Resin RC130

1.3 IDENTIFICATION OF THE COMPANY:

RAR Resin & Chemical Industries JLT
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2 CHEMICAL COMPOSITION OF GLYCERINE USP GRADE

Name	CAS#	% by Weight
Rosin Resin	68038-41-5	100

3 HAZARD IDENTIFICATION

Amber solid with a mild odor.

- WARNING!** May form flammable or explosive dust-air mixtures
- Avoid breathing dust.

Potential Health Effects

Eye Resin dust can cause mechanical irritation.
Skin No effects are known from the solid resin or dust.
Inhalation During normal use of the molten resin at temperatures below 180°C there is only minimal risk from inhalation of resin fumes, when effective ventilation is used. Inhalation of resin dust or fumes may cause mild irritation of the nose and throat in sensitive individuals.
Ingestion Not a probable route of entry into the body.
Subchronic effects (Target Organ Effects) No effects known.
Chronic Effects No known effects.

4 FIRST AID MEASURES

Eye Contact: In case of contact, immediately flush eyes with plenty of water. Call a physician if signs of irritation appear.

Skin Contact:
Solid Resin: As good industrial hygiene practice, at the end of each work shift, wash skin with plenty of soap and water. If resin contacts clothing, wash before reuse.

Molten Resin: Cool the affected area with cold water, but do not attempt to remove the solidified resin from the skin. Consult a physician immediately for burn treatment.

DISCLAIMER

This information contained in the data sheet is to the best of our knowledge correct and up to date. Under well-defined conditions. Its accuracy or suitability under the actual conditions of any independent use is not guaranteed and must be determined by the user. All advice given about this product is given in good faith. Since as we have no control over conditions of substrate, manufacturer and seller cannot accept any liability in connection with the use of the product relative to coverage, performance, injury, or damage, unless we specify in writing to do so. The information in this data sheet is subject to change without prior notice and it is the user responsibility to ensure it is current. For further information and advice please contact RAR RESIN Technical Service Department.

Inhalation: Remove to fresh air if effects occur from inhalation of molten resin vapor or fumes, or resin dust.
Ingestion: Emergency care should not be needed.

5 FIRE AND EXPLOSION DATA

Upper / lower: flammable limits Unknown.
Auto-Ignition: Temperature: Unknown.
Flash Point: Not applicable
Flammability: classification Non-hazardous.
Flame propagation rate Not applicable.
Extinguishing Media: Water fog, foam, carbon dioxide or dry chemical.
Special precaution: Toxic gases such as carbon monoxide may be released during fire. Use positive-pressure, self-contained breathing apparatus and full protective clothing.
Unusual Fire and Explosion Hazards May form flammable dust-air mixtures.

6 ACCIDENTAL RELEASE MEASURES

Containment: Contain the discharged material. If airborne dust is generated, eliminate all sources of ignition that may come into contact with the dust.
Clean-up Procedures: Wear appropriate protective equipment and clothing during clean-up. Avoid generation of dust during clean up. Wear an appropriate respirator if dust is generated above exposure limits. Attempt to reclaim free product, if this is possible. Shovel material into appropriate container for disposal. Follow all Local, State, Federal and Provincial regulations for disposal. sewers or suites of unknown discharge.
Evacuation Procedures: Persons not wearing appropriate protective equipment should be excluded from area of spill until clean-up as been completed.
Special Instructions: Avoid contact with skin and eyes. Avoid skin contact with molten resins. Avoid inhalation of dusts. Avoid inhalation of fumes from molten product.

7 HANDLING AND STORAGE

When handling molten resin, use adequate ventilation to avoid the accumulation of fumes. Use good house-keeping to prevent dust accumulation.

8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Eyes

Solid Resin: Use safety glasses. An eye wash is recommended.
Molten Resin: Use chemical safety goggles. An eye wash is recommended.

Skin

Solid Resin: As good industrial hygiene practice, impervious (for example, nitrile) gloves are recommended.
Molten Resin: Heat-resistant gloves and other protective clothing should be worn to prevent body contact. A safety shower is recommended.
Inhalation Solid Resin: For normal operation, no respiratory protection is required. A dust mask is recommended if resin dust becomes airborne.

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Molten Resin:

An air purifying respirator designed for organic vapors should provide adequate protection.

**ENGINEERING:
CONTROLS**

Use adequate ventilation. In process operations capable of generating static electricity and / or dust clouds; grounding, venting, and explosion relief provisions must be used.

9 PHYSICAL AND CHEMICAL PROPERTIES

Physical state and appearance:

Amber Solid.

Vapor Density:

Not available

Odour:

Slight.

pH:

Not applicable

Color:

Yellow. (Light.)

Molecular Weight:

Not applicable

Specific Gravity:

1.10 at 25°C
(water = 1.00)

Boiling Point:

Not applicable

Vapor Density:

Not available

pH:

Not applicable

Solubility (Water):

< 0.1% at 25°C

Density (vs. water):

Not available

Acid No. (per ASTM D-465):

20-30

R/B Softening Point:

127-133°C

10 STABILITY AND REACTIVITY DATA

Chemical Stability:

Stable under normal temperatures and pressures.

Conditions to avoid:

Avoid strong oxidizing agents. Avoid dispersion of dust in air. Avoid ignition sources where dust is produced.

Incompatibility:

May react with strong oxidizing agents.

Hazardous Decomposition:

Smoke, carbon monoxide, carbon dioxide, and other products of combustion.

Products

Hazardous Polymerization

Hazardous polymerization will not occur under normal temperatures and pressures.

11 TOXICOLOGICAL INFORMATION

Toxicity to Animals

The following data on test animals indicate that chemically similar products have low acute toxicity potential and are not skin or eye irritants by OSHA criteria.

RORTE-SPECIES:

Oral-rat:

TEST	DOSAGE	UNITS	IRRITATION DATA
LD50	> 5	g/kg	Skin-rabbit Non-irritant Eye-rabbit Mild irritant

Toxicity to Humans

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.

CARCINOGENIC EFFECTS: None of this product's components are listed as carcinogens by ACGIH, IARC, NIOSH, NTP or OSHA. **MUTAGENIC EFFECTS:** Not available. **TERATOGENIC EFFECTS:** Not available. No information available on the toxicity of this product to the reproductive system.

12 ECOLOGICAL INFORMATION

Ecotoxicity:

This product does not exhibit immediate danger to the aquatic environment.

Environmental Fate

No information is available.

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13 DISPOSAL CONSIDERATION

Waste Disposal:

Dispose of waste by landfill or incineration in accordance with all local, state and federal regulations.

This product is not included in the lists of hazardous substances (40 CFR 261.33), nor does it exhibit the characteristics of hazardous waste (40 CFR 261.20-24)

14 TRANSPORT INFORMATION

DOT Classification:

Not a DOT controlled material (United States)

Proper Shipping Name:

None

DOT Identification Number:

None

Packing Group:

None

Hazardous substances:

Not available

Reportable Quantity:

Additional Shipping Information:

Not determined

Not determined

15 REGULATORY INFORMATION

Federal and State Regulations

Toxic Substances Control Act (TSCA): This product is on the TSCA SARA, Title III. Section 313 (40 CFR 372): This product contains the following substances which are reportable under SARA Toxic Chemical Release Reporting Regulations.

Canadian Environmental Protection Act (CEPA) Status: This product is on the DSL. SARA 311/312 Hazard Categories: This product has the following hazard categories:

None

WHMIS (Canada) Status: Not a controlled product under WHMIS.
European EINECS.

16 OTHER INFORMATION

Hazard Ratings

NFPA 1 HEALTH 1 FIRE 0 Reactivity

Revision Note

Revision 7. Revised MSDS# and Section 1 and 15.

Notice to Reader:

Reasonable care has been taken in the preparation of this information, but the manufacturer makes no warranty of merchantability or any other warranty, expressed or implied, with respect to this information. The manufacturer makes no representations and assumes no liability for any direct, incidental or consequential damages resulting from its use.