

TECKROS R98

SAFETY DATA SHEET

1. Identification

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| Product Identifier/Code | Teckros R98, Gum Rosin Ester |
| Recommended use | Adhesives, Sealants, Coatings, Wax, and other formulations |
| Recommended restrictions | None known |
| Manufacturer | Teckrez, Inc. |
| Company address | 4209 Baymeadows Rd, Suite 3 Jacksonville, FL 32217 USA Office: 1-904-215-7885 Fax: 1-904-215-7797 Emergency: 1-904-881-2205 |

2. Hazards Identification

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| Physical hazards | Not classified; molten material will cause thermal burns. |
| Health hazards | Serious eye damage/eye irritation. Category 2B Sensitization, skin. Category 1B |
| OSHA defined hazards | Combustible dust |
| Label elements | |



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| Signal word | Warning |
| Hazard statement | May cause an allergic skin reaction and eye irritation. May form combustible dust concentrations in air. |
| Precautionary statement | Practice good industrial hygiene. Store in protective environment, away from incompatible materials and elevated temperature equipment. Wash hands and other exposed areas after handling. Waste disposal in accordance with local requirements. |
| Storage | Store away from incompatible materials. |
| Disposal | Dispose of contents/container in accordance with local/regional/national/international regulations. |
| Hazards not otherwise classified (HNOC) | None known |

3. Composition/Information on Ingredients

| Chemical Name | CAS number | % |
|-------------------------|-------------------|----------|
| Modified Ester of Rosin | Proprietary | >99.8% |
| Antioxidant | Proprietary | 0.1-0.2% |

4. First-aid Measures

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| Inhalation | Move exposed person to fresh air. Keep person warm and at rest. Get medical attention if symptoms persist. |
| Skin contact | Flush contaminated skin with soap and water. Remove contaminated clothing and shoes. Cool as quickly as possible if exposed to molten material. Do not attempt to remove adhered material from skin; material will come off as healing occurs. Get medical attention if symptoms occur. |
| Eye contact | Immediately flush eyes with water for at least 15 minutes, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses if easy to do. Get medical attention if irritation occurs and persists. |
| Ingestion | Seek medical attention. |
| Most important symptoms/ effects, acute and delayed | Dust may irritate intestinal track. |
| Indication of immediate medical attention and special treatment needed | Burns should be treated as thermal burns; material will come off as healing occurs. |

5. Fire-fighting Measures

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| Suitable extinguishing media | Water spray, dry chemical, carbon dioxide |
| Unsuitable extinguishing media | Avoid high pressure extinguisher application which could spread fire. |
| Specific hazards arising from the chemical | Powdered material may cause explosive dust-air combinations, particularly in presence of static electricity. Hazardous decomposition products in the case of a fire includes: CO ₂ , carbon monoxide, smoke. |
| Specific protective equipment and precautions | Appropriate protective clothing and self- contained breathing apparatus (SCBA) with a full-face piece operated in positive pressure mode. |
| Specific methods | Use standard firefighting procedures and consider hazards of other materials. |

6. Accidental Release Measures

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| Personal precautions, protective equipment and emergency procedures | Use suitable protective equipment. Keep unnecessary personnel away from material. |
| Methods and materials for containment and cleaning up | Vacuum or carefully contain and collect material and place in an appropriate container for disposal. Avoid creating dusty conditions and prevent wind dispersal. |
| Environmental precautions | Keep from drains; prevent uncontrolled run-offs. |

7. Handling and Storage

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| Precautions for safe handling | Wash thoroughly after handling. Prevent contact with molten material. |
| Conditions for safe storage, including any incompatibilities | Keep container tightly closed in a cool, well-ventilated area. Keep away from ignition sources and static electricity. Employ good housekeeping practices to prevent build-up of dust and residue. |

8. Exposure Controls/Personal

8.1 Occupational exposure limits

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| USA ACGIH | ACGIH (mg/m ³) | 10 mg/m ³ (inhalable dust) |
| USA ACGIH | Remark (ACGIH) | Particulates, not otherwise classified |

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| USA OSHA | OSHA PEL (TWA) (mg/m ³) | 15 mg/m ³ (total dust) 5 mg/m ³ (respirable dust) |
| USA OSHA | Remark (US OSHA) | Particulates, not otherwise classified |

8.2 Exposure controls

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| Appropriate engineering controls | Ensure good ventilation of the work station. Consider explosion proof ventilation equipment. |
| Hand protection | Protective chemical resistant gloves |
| Eye protection | Safety glasses with side shields (or goggles) |
| Skin and body protection | Wear suitable protective clothing, including appropriate clothing for exposure to molten material. |
| Respiratory protection | Where exposure through inhalation may occur from use, respiratory protection equipment of approved standard is recommended. Wear appropriate respiratory protection, if occupational exposure limits are exceeded or irritation/sensitivity is experienced. |

9. Physical and Chemical Properties

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| Appearance | |
| Physical state | Solid |
| Form | Solid |
| Color | Pale yellow |
| Odor | Bland (slight rosin) |
| pH | Not available |
| Melting point | 96-104°C |
| Initial boiling point | >260°C (500°F) |
| Flash point | Closed cup 260°C |
| Evaporation rate | Not determined; considered negligible |
| Auto ignition temperature | >260°C |
| Flammability (solid, gas) | Not determined |
| Decomposition temperature | Not established. Very low hazard expected at normal operating conditions. |
| Density | 1.08 g/cm ³ (8.549 lb(s)/gal) |
| Solubility | Insoluble in water. Good solubility in aliphatic and aromatic hydrocarbons. Minimal solubility in alcohols. |
| Viscosity | 400 cps @ 177°C |

10. Stability and Reactivity

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| Reactivity and chemical stability | Non-reactive and stable under normal operating conditions. Decomposition can occur at elevated temperatures. |
| Possibility of hazardous reactions | None known under normal operating conditions. |
| Conditions to avoid | Open flame, static electricity, dusty conditions |
| Incompatible materials | Strong oxidizing agents |
| Hazardous decomposition products | Smoke, carbon dioxide, carbon monoxide |

11. Toxicology Information

Information on likely routes of exposure

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| Inhalation | Dust and vapor. Fumes may irritate respiratory system. |
| Skin Contact | May cause allergic skin reaction. Molten material causes thermal burns. |
| Eye Contact | Causes eye irritation. |

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| Modified Rosin Ester | Irritation Corrosion-Eye: data is for similar product; Result: Positive; Species: NZ white rabbit; Organ: Eye; Test duration: 4 hr; Observation period: 72 hr; Notes: OECD 405 |
| Ingestion | Expected to be a low ingestion hazard. |
| Symptoms related to the physical, chemical, and toxicological characteristics | Dusts may irritate the respiratory tract, skin, and eyes. Exposed individuals may experience eye tearing, redness, and discomfort. May cause allergic skin reaction and dermatitis. |
| Information on toxicological effects | |
| Acute toxicity | May cause an allergic skin reaction. |

| Components | Species | Test Results |
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| Modified Rosin Ester | | |
| Acute Oral LD50 | Rat | >5,000 mg/kg; data is for similar product. >2,000 mg/kg; at this dose no death occurred; data is for similar product. |
| Acute NOAEL | Wistar rat | 300 mg/kg/day; 8 wks developmental; data is for similar product. |
| Acute NOEL | Wistar rat | 1,000 mg/kg/day; 8 wks reproductive; data is for similar product. |
| *Estimates for product may be based on additional component data not shown. | | |

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| Skin corrosion/irritation | Prolonged skin contact may cause temporary irritation. |
| Corrosivity (mod. rosin ester) | Irritation Corrosion-Skin: No skin irritation; data is for similar product; Result: negative; Species: NZ white rabbit; Organ: Skin; Test Duration: 4 hr; Observation Period: 72 hr; Notes: OECD 404 |
| Serious eye damage/irritation | Causes eye irritation. |
| Eye contact (mod. rosin ester) | Irritation Corrosion-Eye: data is for similar product; Result: positive; Species: NZ white rabbit; Organ: Eye; Test Duration: 4 hr; Observation Period: 72 hr; Notes: OECD 405 |
| Respiratory or skin sensitization | |
| Respiratory sensitization | Not available |
| Skin sensitization | May cause an allergic skin reaction. |
| Skin sensitization (mod. RE) | 50% w/Local Lymph Node Assay: Lowest concentration producing reaction; SI=5; may cause sensitization by skin contact. Result: positive; Species: Mouse; Notes: OECD 429 |
| Germ cell mutagenicity | No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic. |
| Mutagenicity (mod. RE) | Germ Cell Mutagenicity: Ames, data is for similar product; Result: negative; Species: Salmonella typhimurium; Notes: OECD 471 Germ Cell Mutagenicity: Chromosome Aberration, data is for similar product; Result: negative; Species: Human; Notes: OECD 473 In-vitro Mammalian Cell Gene Mutation test, no data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic; data is for similar product; Result: negative; Species: Mouse; Notes: OECD 476 |
| Carcinogenicity | This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA. |
| OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050) | Not listed. |
| Reproductive toxicity | This product is not expected to cause reproductive or developmental effects. |
| Specific target organ | Not classified |

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| toxicity-single exposure | |
| Specific target organ | Not classified |
| toxicity-repeated exposure | |
| Aspiration hazard | Not available |

12. Ecological Information

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| Ecological impact statement | May cause harmful effects to aquatic life. Not readily biodegradable. No other adverse environmental effects are expected. |
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13. Disposal Considerations

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| Disposal instructions | Disposal of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. |
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14. Transport Information

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| DOT | Not regulated as dangerous goods |
| IATA | Not regulated as dangerous goods |
| IMDG | Not regulated as dangerous goods |

15. Regulatory Information

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| 15.1. US Federal regulations | This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. All components are on the US EPA TSCA inventory list. |
| TSCA Section 12(b) Export Notification (40 CFR 707, subpoint D) | Not regulated |
| CERCLA Hazardous Substance List (40 CFR 302.4) | Not listed |
| OSHA Specially Regulated Substances (29 CFR 1010.1001-1050) | Not listed |
| Superfund Amendments and Reauthorization Act 1986 (SARA) Hazard Categories | Immediate Hazard: No; Delayed Hazard: No; Fire Hazard: No; Pressure Hazard: No; Reactivity Hazard: No |
| SARA 302 Emergency Hazardous Substance | Not regulated |
| SARA 304 Emergency Release Notification | Not regulated |
| SARA 311/312 Hazardous Chemical | No |
| SARA 313 TRI Reporting | Not regulated |
| Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) list | Not regulated |
| Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130) | Not regulated |
| Safe Drinking Water Act (SDWA) | Not regulated |

15.2. US State regulations

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| California Controlled Substances, Dept. of Justice (CA Health and Safety Code Section 11100) | Not listed |
| Massachusetts RTK-Substance List | Not regulated |
| New Jersey Worker and Community RTK Act | Not listed |
| Pennsylvania Worker and Community RTK Law | Not listed |
| Rhode Island RTK | Not listed |

15.3 International regulations

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| Canada DSL | Yes |
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16. Other Information, including date of preparation or last revision

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| NFPA health hazard | 2 |
| NFPA fire hazard | 1 |
| NFPA reactivity | 0 |
| HMIS III Rating | |
| Health | 2 |
| Flammability | 1 |
| Physical hazard | 0 |
| Personal protection | See section 8 of SDS |
| Version | 3.0 |
| Date of issue | October 14, 2022 |

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