

SAFETY DATA SHEET
TRU Resin SDS - Bulk and Cartridge

Revision Date: 22-May-15

Section 1: Chemical Product and Company Identification

Product Name TRU Resin
Product Number(s): TR1ML-R01-S, TR1ML-R50-S, TR-B01-A, TR-B01-F, TR-B01-S, TR-B01-XAD, TR-B100-A, TR-B100-S, TR-B200-A, TR-B200-S, TR-B25-A, TR-B25-S, TR-B50-A, TR-B50-S, TR-R01-S, TR-R25-S, TR-R50-S
Product Synonym(s): Eichrom TRU Resin
Identified Uses: Laboratory chemicals, manufacture of substances
Manufacturer: Eichrom Technologies LLC
1955 University Lane
Lisle, Illinois 60532
General Information: (8-5 CST M-F)
800-422-6693 (in USA)
630-963-0320

24 Hour Emergency Number:

CHEMTREC: 800-424-9300

Section 2: Hazard(s) Identification



GHS Signal Word: **Warning**
GHS Classification of substance or mixture: Eye Irritant
Skin Irritant
Respiratory Tract Irritation
Acute toxicity, Inhalation (Category 5)
Acute hazards to the aquatic environment (Category 2)
Hazard Statement(s): H319 Causes serious eye irritation
H315 Causes skin irritation
H335 May cause respiratory irritation
H333 May be harmful if inhaled
H401 Toxic to aquatic life

Prevention:

P261 Avoid breathing dust and vapors.
P264 Wash hands thoroughly after handling.
P271 Use only outdoors or in a well-ventilated area.
P273 Avoid release to the environment.
P280 Wear protective gloves and eye protection.

Response:

P302/P352 IF ON SKIN: Wash with plenty of soap and water.
P304/P312 Call a POISON CONTROL CENTER or doctor if you feel unwell.
P304/P340 IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.
P305/P351/P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P332/P313 If skin irritation occurs, seek medical attention.
P337/P313 If eye irritation persists, get medical attention.
P362 Take off contaminated clothing and wash before reuse.
P391 Collect Spillage.

Storage:

P403/P233 Store in a well-ventilated place. Keep container tightly closed.

Disposal:

P501 Dispose of contents/container in accordance with federal, state, and local regulations.

Section 3: Composition / Information on Ingredients

| Component | CAS_Number | Percentage Range |
|--------------------------------|------------|------------------|
| Nonionic Acrylic Ester Polymer | | 60% |
| TriButylPhosphate | 126-73-8 | 27-28% |
| CMPO | 83242-95-9 | 12-13% |

Section 4: First-aid Measures

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| Ingestion | Contact local poison control center |
| Skin Contact | Wash immediately with soap and copious amounts of water. Remove and wash contaminated clothing promptly. If irritation develops, seek medical attention. |
| Eye Contact | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |
| Inhalation | Remove to fresh air. If breathing is labored, administer oxygen. If not breathing, give artificial respiration. Seek medical attention. |
| Most important symptoms and effects, both acute and delayed | No further relevant information available. |
| Indication of any immediate medical attention and special treatment needed | Treat according to symptoms (decontamination, vital functions), no known specific antidote. |

Section 5: Firefighting Measures

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| Extinguishing Media | Foam, CO2, Dry Chemical |
| Special Hazards | Possible combustion products include phosphorous oxides, phosphoric acid, carbon dioxide, and carbon monoxide, in addition to unidentified organic compounds. |
| Fire and Explosion Hazards | Highly toxic and irritating fumes may be released and extinguishing water runoff may be toxic. |
| | Polymer does not support flame. |
| Protective Equipment | Wear positive pressure self-contained breathing apparatus and full personal protective equipment. |

Section 6: Accidental Release Measures

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| | Use proper personal protect equipment (specified in section 8) |
| Personal precautions | Avoid breathing vapors, mist, or gas. See section 8. |
| | Surface may be slippery. |
| Containment Cleanup | Sweep up material and transfer to a suitable container for disposal. |
| Reference to other sections | For disposal see section 13. |

Section 7: Handling and Storage

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| Specific End Use(s) | Apart from the uses mentioned in section 1 no other specific uses are stipulated. |
| Conditions for safe handling | Avoid contact with skin and eyes. Avoid inhalation of vapor or mist. |
| | Use mechanical exhaust if dust is formed. |
| Conditions for safe storage | Keep away from strong oxidizers. |
| | Normal warehouse storage in cool, dry area is satisfactory. |

Section 8: Exposure Controls / Personal Protection

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| Engineering controls | Mechanical exhaust is required. |
| Control Parameters | Per ACGIH, TLV-TWA for Tributylphosphate is 2 ppm. Per OSHA, PEL TWA is 5 mg/m3 for Tributylphosphate. Per NIOSH, REL TWA is 0.2 ppm (2.5 mg/m3) for Tributylphosphate and IDLH is 30 ppm for Tributylphosphate |
| Exposure Controls | Avoid contact with skin, eyes, and clothing. Wash hands before breaks and immediately after handling the product. |
| | Do not eat, drink or smoke when using this product |
| Eye protection | Wear safety glasses. |
| Skin Protection | Wear protective gloves, clothing, and eye protection. |
| Respiratory protection | Use NIOSH/MSHA approved respirator when handling material outside of mechanical exhaust. An air-purifying respirator with an organic vapor cartridge or canister may be permissible. |

Section 9: Physical Properties

Information on basic physical and chemical properties

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| Appearance: | Powder Hard, off-white spherical beads | Explosion Limits (Upper/Lower): | Not Established |
| Odor: | Low to none | Flash Point: | Not applicable |
| Odor Threshold: | Not Established | Flammability: | Not Established |
| pH: | Not relevant | AutoIgnition Temperature: | Product is not self-igniting. |
| Melting Point: | Not Established | Decomposition Temperature | Not Established |
| Boiling Point: | Not Established | | |
| Relative Density: | 0.37 g/mL at 25°C | VaporPressure: | Not Established |
| Solubility: | Insoluble in water | VaporDensity: | Not Established |
| Partition Coefficient: | Not Established | Evaporation Rate: | Not Established |
| Viscosity: | Not Applicable | | |

Section 10: Stability and Reactivity

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| Reactivity | No hazardous reactions if stored and handled as indicated. |
| Chemical Stability | Stable under normal handling and storage conditions. |
| Hazardous Reactions | No hazardous reactions are expected in normal laboratory use. Hazardous polymerization will not occur. |
| Materials to Avoid | Contact with strong oxidizers will degrade material. |
| Hazardous decomposition Products | Possible combustion products include phosphorous oxides, phosphoric acid, carbon dioxide, and carbon monoxide; additional unidentified organic compounds may also be produced. |

Section 11: Toxicology Information

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| Acute Toxicity | |
| Oral Effects | CMPO, oral LD50 >5000 mg/kg. TRU Resin, estimated oral LD50 is 4300 mg/kg (mouse). Polymer, Oral LD50 > 5,000 mg/kg (rat) Tributylphosphate, Oral LD50 is 3000 mg/kg (rat). Tributylphosphate, Oral LD50 is 1189 mg/kg (mouse). |
| Inhalation Effects | Tributylphosphate, inhalation LC50, mouse: 1300 mg/m3. Tributylphosphate, inhalation LC50 is 2529 ppm (rat - 1 hr) [or 28000 mg/m3] TRU Resin, estimated inhalation LC50 is 9200 ppm (rat - 1 hr) [or 36 mg/l] |
| Eye Effects | Tributylphosphate, Draize test, rabbit, eye: 500 mg Severe. May cause irritation or corneal injury. |
| Dermal Effects | TRU Resin, estimated dermal LD50 is > 5,000 mg/kg (mouse). CMPO, dermal LD50 >2000 mg/kg. Polymer, Dermal LD50 > 5,000 mg/kg (rabbit) Tributylphosphate, dermal LD50 is >3100 mg/kg (rabbit) |
| Skin corrosion/irritation | Tributylphosphate is a mild eye irritant (rabbit). No data available for other components. |
| Serious eye damage/irritation | Tributylphosphate is a mild skin irritant (rabbit). No data available for other components. |
| Respiratory or skin sensitization | No data available regarding respiratory or skin sensitization effects of this product. |
| Germ Cell Mutagenicity | No data available regarding mutagenic effects of this product. |
| Carcinogenicity | No data available regarding mutagenic effects of this product. |

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| | No specific data available for some components. Minimize direct exposure to material. |
| | No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible, or confirmed human carcinogen by IARC. |
| | No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP. |
| | No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA. |
| | Tributylphosphate, Limited evidence of carcinogenicity in animal studies. (Rat, Oral, Kidney, Ureter, Bladder: tumors; Mouse, Oral, Liver: tumors). |
| Reproductive Toxicity | No data available regarding reproductive effects of this product. |
| Specific Target Organ Toxicity | |
| Single Exposure | No data available regarding specific target organ toxicity single exposure. |
| Repeated Exposure | No data available regarding specific target organ toxicity repeated exposure. |
| Aspiration Hazard | No data available regarding aspiration hazards associated with this product. |

Section 12: Ecological Information

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| | No data are available on the adverse effects of this material on the environment. |
| Aquatic Toxicity | |
| Acute Toxicity to fish | Tributylphosphate - LC50, Carassius auratus (goldfish) - 8.8 mg/l - 96 hr |
| Acute Toxicity to aquatic invertebrates | Tributylphosphate - EC50, Daphnia magna (water flea) - 3.6 mg/l - 48 hr |
| Acute toxicity to aquatic plants | Tributylphosphate - EC50, Desmodesmus subspicatus (green algae) - 1.1 mg/l - 72 hr |
| Acute Toxicity to fish | TRU Resin - Estimated LC50, Carassius auratus (goldfish) - 32 mg/l - 96 hr |
| Acute Toxicity to aquatic invertebrates | TRU Resin - Estimated EC50, Daphnia magna (water flea) - 14 mg/l - 48 hr |
| Acute toxicity to aquatic plants | TRU Resin - Estimated EC50, Desmodesmus subspicatus (green algae) - 4.5 mg/l - 72 hr |
| Persistence and degradability | |
| Biodegradability | Tributylphosphate - aerobic biodegradability - exposure time 28 d, 89% - readily biodegradable. |
| Bioaccumulative potential | |
| | Tributylphosphate - Oryzias latipes - 38 d - 93 ug/l; Bioconcentration factor: 21-35 |
| Mobility in Soil | No data are available for mobility in soil. |
| PBT/vPvB assessment | PBT/vPvB assessment not available as chemical safety assessment not required/not conducted. |
| Other | An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Very toxic to aquatic life with long lasting effects. |

Section 13: Disposal Considerations

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| General | Dispose of contents/container in accordance with federal, state, and local regulations. |
| Unused: | Bury resin in licensed landfill or burn in approved incinerator equipped with an afterburner and scrubber according to local, state, and federal regulations. |
| Used: | For resin contaminated with hazardous materials, dispose of mixture as hazardous material according to local, state, and federal regulations. |

Section 14: Transport Information

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| Air Transport: | Not Hazardous per IATA 2014 |
| Ground Transport: | Not D.O.T. Hazardous |
| Water Transport: | Not Hazardous per IMDG 2012. |

Section 15: Regulatory Information

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| US Federal Regulations | |
| | Toxic Substances Control Act (TSCA): This material is provided to you under the research and development (R&D) exemption. |
| US State Regulations | |
| | A component, Tributylphosphate [CAS 126-73-8], is listed on the following state right to know lists: CA, MA, MN, NJ, PA |

Section 16: Other Information

Revision Updated to GHS SDS format, including classification

SDS Prepared By: Eichrom Technologies LLC

The information set forth herein has been gathered from standard reference materials and is to the best knowledge and belief of Eichrom Technologies LLC, accurate and reliable. Such information is offered solely for your consideration, investigation and verification, and does not suggest or guarantee that the hazard precautions or procedures mentioned are the only ones that exist. Eichrom Technologies LLC makes no warranties, express or implied, with respect to the use of such information or the use of the specific material identified herein in combination with any other material or process, and assumes no responsibility therefore.