# Safety Data Sheet

According to 29 CFR 1910.1200 (OSHA Hazard Communication Standard, 2024)

Version 2 · Date of preparation 2026-10-07

## Section 1. Identification

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| Product identifier used on the label | 2-Chlorotrityl chloride resin (product number 51301) |
| Other means of identification | Product number: 51301<br>Abbreviation: 2-Chlorotrityl chloride resin |
| Recommended use of the chemical and restrictions on use | Recommended use: solid support (resin) for solid-phase peptide synthesis. For research and development use only.<br>Restrictions on use: not for food, drug, household, pesticide or biocidal use. |
| Name, U.S. address, and U.S. telephone number of the chemical manufacturer, importer, or other responsible party | P3 BioSystems<br>270 Haven Hill Rd, Shelbyville, KY 40065<br>Telephone: +1 888-737-5598<br>Email: info@p3bio.com |
| Emergency phone number | +1 888-737-5598 (P3 BioSystems office line, business hours) |

## Section 2. Hazard identification

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| Classification of the chemical in accordance with paragraph (d)(1) of § 1910.1200, except for classification under paragraph (d)(1)(ii) | • Skin corrosion/irritation, category 2<br>• Eye damage/irritation, category 2A<br>• Specific target organ toxicity (single exposure), category 3<br>• Label elements for OSHA defined hazards, category Combustible Dust |

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| Signal word, hazard statement(s), symbol(s) and precautionary statement(s) in accordance with paragraph (f) of § 1910.1200 | **Signal word: Warning**<br>Hazard pictograms: Exclamation Mark<br>Hazard statements:<br>• H315 Causes skin irritation.<br>• H319 Causes serious eye irritation.<br>• H335 May cause respiratory irritation.<br>• May form combustible dust concentrations in air if small particles are generated during further processing, handling or by other means.<br>Precautionary statements:<br>• P261 Avoid breathing dust.<br>• P264 Wash hands thoroughly after handling.<br>• P271 Use only outdoors or in a well-ventilated area.<br>• P280 Wear protective gloves/protective clothing/eye protection/face protection.<br>• P302+P352 If on skin: Wash with plenty of soap and water.<br>• P304+P340 If inhaled: Remove person to fresh air and keep comfortable for breathing.<br>• P305+P351+P338 If in eyes: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.<br>• P312 Call a poison center/doctor if you feel unwell.<br>• P332+P313 If skin irritation occurs: Get medical advice/attention.<br>• P337+P313 If eye irritation persists: Get medical advice/attention.<br>• P362+P364 Take off contaminated clothing and wash it before reuse.<br>• P405 Store locked up.<br>• P501 Dispose of contents/container to a licensed waste disposal facility in accordance with local, state and federal regulations. |
| Hazards classified under paragraph (d)(1)(ii) of § 1910.1200 | None identified. |
| Hazards not otherwise classified that have been identified during the classification process | None identified. |
| Where an ingredient with unknown acute toxicity is used in a mixture at a concentration ≥ 1% and the mixture is not classified based on testing of the mixture as a whole, a statement that X% of the mixture consists of ingredient(s) of unknown acute toxicity | Not applicable: the product is a substance, not a mixture. |

## Section 3. Composition/information on ingredients

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| Chemical name | 2-Chlorotrityl chloride resin |
| Common name and synonyms | 2-Chlorotrityl chloride resin; 2-chlorotrityl chloride, polymer-bound; 2-ClTrt-Cl resin; 2-CTC resin. |

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| CAS number and other unique identifiers | No applicable information available. |
| Impurities and stabilizing additives (constituents) which are themselves classified and which contribute to the classification of the substance | None known. The product is 2-chlorotrityl chloride linker on polystyrene cross-linked with 1% divinylbenzene; 100-200 mesh, substitution 0.3-1.6 mmol/g (per specification). No classified impurities, residual solvents or stabilizing additives are known. |

## Section 4. First-aid measures

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| Description of necessary measures, subdivided according to the different routes of exposure, i.e., inhalation, skin and eye contact, and ingestion | General: Move out of the danger area. Show this safety data sheet to the attending physician. If symptoms persist, call a physician.<br>Inhalation: Remove the person to fresh air and keep comfortable for breathing. If not breathing, give artificial respiration. Call a poison center or doctor if you feel unwell.<br>Skin: Take off contaminated clothing. Wash off immediately with plenty of soap and water for at least 15 minutes. If skin irritation occurs or persists, get medical advice/attention. Wash contaminated clothing before reuse.<br>Eyes: Rinse cautiously with plenty of water, also under the eyelids, for at least 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical advice/attention.<br>Ingestion: Rinse mouth with water. Never give anything by mouth to an unconscious person. Get medical attention if symptoms occur. |
| Most important symptoms/effects, acute and delayed | Causes skin irritation and serious eye irritation. May cause respiratory irritation.<br>Delayed effects: no information available. |
| Indication of immediate medical attention and special treatment needed, if necessary | Treat symptomatically. |

## Section 5. Fire-fighting measures

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| Suitable (and unsuitable) extinguishing media | Suitable: water spray, foam, carbon dioxide, dry chemical powder.<br>Unsuitable: no limitations are known. |
| Specific hazards arising from the chemical (e.g., nature of any hazardous combustion products) | Combustible solid. Fine dust dispersed in air may form combustible dust concentrations; a dust explosion is possible if a dust cloud meets an ignition source. Keep away from heat and sources of ignition.<br>Hazardous combustion products: carbon monoxide, carbon dioxide and hydrogen chloride. |
| Special protective equipment and precautions for fire-fighters | Wear a NIOSH/MSHA-approved, pressure-demand self-contained breathing apparatus and full protective gear. Thermal decomposition can release irritating gases and vapors. Prevent fire-extinguishing water from contaminating surface water or groundwater. |

## Section 6. Accidental release measures

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| Personal precautions, protective equipment, and emergency procedures | Use personal protective equipment (see Section 8). Avoid generating dust and avoid breathing dust. Remove all sources of ignition. Ensure adequate ventilation. |
| Methods and materials for containment and cleaning up | Take up dry. Sweep up or vacuum the spilled material without raising a dust cloud and place it in a suitable closed container for disposal (see Section 13). Keep ignition sources away and clean up dust deposits. Do not let the product enter drains. |

## Section 7. Handling and storage

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| Precautions for safe handling | Avoid formation of dust and do not breathe dust. Minimize dust generation and accumulation on surfaces. Provide appropriate exhaust ventilation where dust is formed. Keep away from heat and sources of ignition. Avoid contact with skin, eyes and clothing. Do not eat, drink or smoke when handling. Wash hands thoroughly after handling. Protect from moisture: weigh and handle quickly and reseal the container. |
| Conditions for safe storage, including any incompatibilities | Keep the container tightly closed. Store: 2-8°C, Dry Place (per specification). Moisture sensitive: keep dry, preferably under an inert gas (nitrogen or argon). Allow the container to warm to room temperature before opening. Keep away from sources of ignition.<br>Incompatible materials: strong oxidizing agents, water and moisture, alcohols, amines and strong bases (outside the intended loading reaction). |

## Section 8. Exposure controls/personal protection

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| OSHA permissible exposure limit (PEL), ACGIH Threshold Limit Value (TLV), and any other exposure limit used or recommended by the chemical manufacturer, importer, or employer preparing the safety data sheet, where available | No OSHA PEL or ACGIH TLV has been established for this product. One US supplier recommends keeping dust exposure below 5 mg/m3. |
| Appropriate engineering controls | Use with adequate ventilation; use local exhaust ventilation (e.g. a fume hood) where dust is generated, and prevent dust accumulation. An eyewash station should be available where the material is used. |
| Individual protection measures, such as personal protective equipment | Eyes/face: Chemical safety goggles, or safety glasses with side shields (29 CFR 1910.133).<br>Skin: Chemical-resistant gloves (e.g. nitrile rubber); inspect before use and remove without touching the outer surface. Wear a lab coat.<br>Respiratory: Required when dust is generated: use a NIOSH-approved particulate respirator (e.g. N95), under a respiratory protection program meeting 29 CFR 1910.134.<br>Hygiene: Change contaminated clothing. Wash hands after working with the product. |

## Section 9. Physical and chemical properties

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| Physical state | Solid (resin beads). |
| Color | Yellow or brown (per specification). |
| Odor (includes odor threshold) | Slight odor (one supplier); not determined by others. Odor threshold: no applicable information available. |
| Melting point/freezing point | Does not melt; degrades before melting (cross-linked polymer). |
| Boiling point (or initial boiling point or boiling range) | Not applicable; does not boil. |
| Flammability | Combustible solid. Fine dust dispersed in air may form an explosible dust-air mixture. No flammable-solid test data available. |
| Lower and upper explosion limit/flammability limit | No applicable information available. |
| Flash point | Not applicable (solid). |
| Auto-ignition temperature | No applicable information available. |
| Decomposition temperature | No applicable information available. |
| pH | No applicable information available. |
| Kinematic viscosity | Not applicable (solid). |
| Solubility | Insoluble in water (not miscible). |
| Partition coefficient n-octanol/water (log value) | No applicable information available. |
| Vapor pressure (includes evaporation rate) | Vapor pressure: no applicable information available. Evaporation rate: not applicable (solid). |
| Density and/or relative density | No applicable information available. |
| Relative vapor density | Not applicable (solid). |
| Particle characteristics | Beads, 100-200 mesh (per specification). A small fraction of fine, respirable particles may be present. |

## Section 10. Stability and reactivity

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| Reactivity | Reacts with water and moisture, liberating hydrogen chloride. Like other combustible organic solids, the finely divided material may present a dust explosion hazard when dispersed in air. |
| Chemical stability | Stable under recommended storage conditions (dry, cold, tightly closed). Moisture sensitive. |
| Possibility of hazardous reactions, including those associated with foreseeable emergencies | Reacts with water, moisture, alcohols and amines, releasing hydrogen chloride. Dust dispersed in air can ignite in the presence of an ignition source. |
| Conditions to avoid (e.g., static discharge, shock, or vibration) | Exposure to moisture or humid air; heat, flames, sparks and other ignition sources; generation and accumulation of dust. |

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| Incompatible materials | Water, alcohols, amines, strong bases and strong oxidizing agents. |
| Hazardous decomposition products | Carbon monoxide, carbon dioxide and hydrogen chloride. |

## Section 11. Toxicological information

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| Information on the likely routes of exposure (inhalation, ingestion, skin, and eye contact) | Inhalation of dust, skin contact, eye contact and ingestion. A small fraction of the material may be respirable. |
| Symptoms related to the physical, chemical, and toxicological characteristics | Skin: irritation.<br>Eyes: serious eye irritation.<br>Inhalation: irritation of the respiratory tract. |
| Delayed and immediate effects and also chronic effects from short- and long-term exposure | Immediate: skin, eye and respiratory tract irritation.<br>Delayed and chronic effects: no data available. The toxicological properties have not been fully investigated. |
| Numerical measures of toxicity (such as acute toxicity estimates) | No data available. |
| Interactive effects; information on interactions should be included if relevant and readily available | No applicable information available. |
| Whether the hazardous chemical is listed in the National Toxicology Program (NTP) Report on Carcinogens (latest edition) or has been found to be a potential carcinogen in the International Agency for Research on Cancer (IARC) Monographs (latest edition), or by OSHA | Not listed by NTP, IARC or OSHA as a carcinogen. |
| When specific chemical data or information is not available, whether alternative information is used and the method used to derive the information (e.g., information from a class of chemicals rather than the exact chemical, using SAR) | No alternative (analog, class or SAR) information was used for classification. |

## Section 12. Ecological information

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| Ecotoxicity (aquatic and terrestrial, where available) | No data available. |
| Persistence and degradability | No data available. |
| Bioaccumulative potential | No data available. |
| Mobility in soil | No data available. |

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| Other adverse effects (such as hazardous to the ozone layer) | Do not let the product enter drains. |

## Section 13. Disposal considerations

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| Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging | Dispose of contents and container in accordance with local, state and federal regulations, using a licensed waste disposal company. Chemical waste generators must determine whether a discarded chemical is classified as a hazardous waste. Dispose of contaminated packaging as unused product. Do not let the product enter drains. |

## Section 14. Transport information

US DOT: not regulated.

IMDG: not offered — P3 does not ship by sea.

IATA: not regulated.

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| UN number | See above: not regulated by any mode P3 ships by. |
| UN proper shipping name | See above: not regulated by any mode P3 ships by. |
| Transport hazard class(es) | See above: not regulated by any mode P3 ships by. |
| Packing group, if applicable | See above: not regulated by any mode P3 ships by. |
| Environmental hazards (e.g., Marine pollutant (Yes/No)) | See above: not regulated by any mode P3 ships by. |
| Transport in bulk (according to IMO instruments) | Not applicable. P3 BioSystems does not ship this product in bulk or by sea. |
| Special precautions which a user needs to be aware of, or needs to comply with, in connection with transport or conveyance either within or outside their premises | None known. |

## Section 15. Regulatory information

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| Safety, health and environmental regulations specific for the product in question | TSCA: The chemicals shipped by P3 BioSystems are not subject to TSCA.<br>SARA 302: no extremely hazardous substances.<br>SARA 313: no components subject to reporting.<br>SARA 311/312 hazard categories: Skin corrosion or irritation; Serious eye damage or eye irritation; Specific target organ toxicity (single or repeated exposure); Combustible dust.<br>Massachusetts Right to Know: no components listed.<br>California Proposition 65: contains no Proposition 65 chemicals. |

## Section 16. Other information, including date of preparation or last revision

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| The date of preparation of the SDS or the last change to it | Date of preparation: 2026-10-07. |

The information above is believed to be accurate and represents the best information available to P3 BioSystems on the date of preparation. It is provided for the safe handling of the product by trained persons in a laboratory and is not a warranty of any kind.