

SAFETY DATA SHEET

This Safety Data Sheet (SDS) complies with the requirements of the U.S. Federal Occupational Safety and Health Administration Hazard Communication Standard (29 CFR 1910.1200, as updated in 2012) and equivalent state Standards. It has also been developed in accordance with the United Nations Globally Harmonized System of Classification of Chemicals (GHS) and the Canadian Workplace Hazardous Materials Information System (WHMIS). Refer to Section 16 of this document for the definition of terms and abbreviations.

SECTION 1: IDENTIFICATION

1.1 PRODUCT IDENTIFIER

- PRODUCT NAME: **SHRINK TUBING, POLY/CHEM SHRINK, CHEMICAL**

1.2 RELEVANT IDENTIFIED USES OF THE MIXTURE/USES ADVISED AGAINST

- RECOMMENDED USE: Preparation of Rubber Coverings for Cable Connectors.
- USED ADVISED AGAINST: None specified.

1.3 DETAILS OF THE SUPPLIER OF THE SAFETY DATA SHEET

- MANUFACTURER/
SUPPLIER: **CONTECH SYSTEMS, INC.**
- ADDRESS: 220 Bingham Drive, #105; San Marcos, CA 92069
- BUSINESS PHONE: 760-471-1696
- EMERGENCY PHONE: 760-471-1696 (9 am – 5 pm Pacific Standard Time).

1.4 OTHER PERTINENT INFORMATION

- This item is a solid synthetic rubber product that has absorbed an evaporative solvent.

SECTION 2: HAZARD IDENTIFICATION

2.1 CLASSIFICATION OF THE SUBSTANCE OR MIXTURE

OSHA/HCS Status The hazard classification is based on the fact that the solvent components are absorbed by a significant percentage within the rubber component.

Classification of the Substance or Mixture Eye Irritant: Category 2B

2.2 LABEL ELEMENTS:

Hazard Pictograms Not applicable.

Signal Word WARNING.

Hazard Statements Causes eye irritation.

Precautionary Statements IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing. If eye irritation persists: Get medical advice/attention.

2.3 OTHER PERTINENT HAZARDS NOT OTHERWISE CLASSIFIED

- No significant health hazards are anticipated under typical circumstances of use or release response.
- The product presents only a slight fire hazard, as it must be pre-heated substantially for ignition to occur.
- This product has been tested and shown not to be harmful to the aquatic environment.

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

3.1/3.2 SUBSTANCES/MIXTURES

This is a solid, synthetic-rubber product which has absorbed at least 49% by volume of an evaporative solvent. The synthetic-rubber component is not hazardous, as defined by the Federal Occupational Health Administration Standard (29 CFR 1910.1200). The composition of the solvent mixture is described in the table below.

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS (Continued)

COMPONENT	CAS NUMBER	GHS Hazard Classes	% (w/w)
SOLVENT COMPONENT 1	Proprietary ¹	Flammable liquids (Category 2); Skin irritation (Category 2); Specific target organ systemic toxicity, - single exposure: Category 3; Respiratory system; Central nervous system; Aspiration hazard; Category 1	Proprietary
SOLVENT COMPONENT 2	Proprietary	Flammable liquids Category 2; Skin irritation (Category 2); Specific target organ systemic toxicity, - single exposure: Category 3; Respiratory system; Central nervous system; Aspiration hazard; Category 1	Proprietary

SECTION 4: FIRST AID MEASURES

4.1 DESCRIPTION OF FIRST AID MEASURES

AREA EXPOSED

Eye Contact

Flush with copious amounts of water for 15 minutes. "Roll" eyes during flush. Check for and remove contact lenses. Seek medical attention if irritation persists.

Skin Contact

Flush area with warm, running water for several minutes. Seek medical attention if irritation persists.

Inhalation

Obtain fresh air.

Ingestion

If conscious only: Rinse mouth with water. Do not induce vomiting. Contact a Poison Control Center or physician for instructions.

4.2 MOST IMPORTANT ACUTE AND CHRONIC EXPOSURE SYMPTOMS

- **ACUTE:** No significant health hazards are anticipated under typical circumstances of use or release response. Contact with eyes can cause irritation and temporary redness.
- **CHRONIC:** Not anticipated to occur when proper precautions are taken.
- **TARGET ORGANS:** Acute: Eyes.

4.3 INDICATION OF IMMEDIATE MEDICAL ATTENTION AND SPECIAL TREATMENT NEEDED:

- **GENERAL INFORMATION: For all exposures:** In case of accident, or if you feel unwell, seek medical advice immediately. Take this document and a copy of the label to the healthcare professional.
- **RECOMMENDATIONS TO PHYSICIANS:** Treat symptomatically.
- **MEDICAL CONDITIONS AGGRAVATED BY OVEREXPOSURE:** None reported.

SECTION 5: FIREFIGHTING MEASURES

5.1 EXTINGUISHING MEDIA

- **RECOMMENDED FIRE EXTINGUISHING MEDIA:** Water Spray, Water Jet, Dry Powder, Foam, Carbon Dioxide, or any other.
- **UNSUITABLE FIRE EXTINGUISHING MEDIA:** None known.

5.2 SPECIAL HAZARDS ARISING FROM THE SUBSTANCE OR MIXTURE

- **NFPA FLAMMABILITY CLASSIFICATION:** Not Flammable.
- **NFPA RATING:** Image to right.
- **UNUSUAL HAZARDS IN FIRE SITUATIONS:**

Decomposition Products

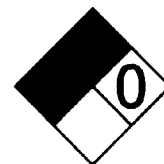
Carbon dioxide, carbon monoxide, bromide compounds, irritating vapors.

Explosion Sensitivity to Mechanical Impact

Not applicable.

Explosion Sensitivity to Static Discharge

Not applicable.



5.3 ADVICE FOR FIREFIGHTERS

- Self-Contained Breathing Apparatus and full protective equipment for fire response should be worn in any situation. Move containers from fire area if it can be done without risk to personnel. Otherwise, use water spray to keep fire-exposed containers cool. Any equipment that comes in contact with this material can be rinsed thoroughly with water and then returned to service.

¹ The components and exact percentage of composition have been withheld as a trade secret. All relevant physical and health hazards have been declared, in accordance with regulatory requirements.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT, AND EMERGENCY PROCEDURES

- **RESPONSE TO INCIDENTAL RELEASES:** If needed, wear gloves and safety glasses when picking up material that has been released from packaging.
- **RESPONSE TO NON-INCIDENTAL RELEASES:** Not anticipated to occur, due to the nature of the product. If several pallets of this product break open, with an associated release of high vapor concentrations, then clear the affected area, protect people, and respond with trained personnel.

6.2 ENVIRONMENTAL PRECAUTIONS

- If necessary, pick up spilled items and use polypads to wipe-up any released solvent. Take necessary precautions to avoid back injury, or slips and falls.

6.3 METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP

- **SPILL RESPONSE EQUIPMENT:** Broom; dustpan; polypad.

6.4 REFERENCES TO OTHER SECTIONS

- **SECTION 8:** For exposure levels and detailed personal protective equipment recommendations.
- **SECTION 13:** For waste handling guidelines.

SECTION 7: HANDLING AND STORAGE

7.1 PRECAUTIONS FOR SAFE HANDLING

Hygiene Practices	Keep out of reach of children. Follow good laboratory hygiene practices. Do not smoke, drink, eat, or apply cosmetics in the pharmaceutical use area. Avoid inhalation of vapors. Use in well-ventilated area. Avoid contact with eyes.
Handling Practices	Employees must be appropriately trained to use this product safely as needed. Keep containers closed when not in use.

7.2 CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES

Storage Practices	Ensure all containers are correctly labeled. Store away from direct sunlight, sources of intense heat, or where freezing is possible.
Incompatibilities	See Section 10 (Stability and Reactivity).

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 CONTROL PARAMETERS

- **AIRBORNE EXPOSURE LIMITS:**

COMPONENT	ACGIH TLV	OSHA PEL	NIOSH REL	OTHER
SOLVENT COMPONENT 1	TWA: 300 ppm	TWA: 500ppm	TWA: 75 ppm C: 385 ppm (15 minutes)	NIOSH IDLH: 1000 ppm (10% LEL)
SOLVENT COMPONENT 2	TWA:400 ppm STEL: 500 ppm	NE	NE	NE

- **BIOLOGICAL OCCUPATIONAL EXPOSURE LIMITS:** Not established.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (Continued)

8.2 EXPOSURE CONTROLS

- **ENGINEERING CONTROLS:** Use this product in well-ventilated environment.
- **RESPIRATORY PROTECTION:** None needed under routine circumstances of use or handling.
- **HAND PROTECTION:** Nitrile, rubber, or latex gloves should be worn when prolonged contact is anticipated.
- **EYE PROTECTION:** None needed under normal circumstances of use or handling. Splash goggles or safety glasses are recommended under certain circumstances (e.g., if there is potential for exposure to high concentrations of the evaporative solvent).
- **BODY PROTECTION:** Protection appropriate for work situation involving tablets (e.g., lab coat).

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 INFORMATION ON BASIC PHYSICAL AND CHEMICAL PROPERTIES

- | | |
|--|--|
| • Appearance | Rubber tubing. |
| • Odor | Slight aromatic. |
| • Odor Threshold | Not applicable. |
| • pH | Not applicable. |
| • Melting Point/Freezing Point | Not applicable. |
| • Initial Boiling Point/Boiling Range | Not applicable to the product in its current form. |
| • Flash Point | Not applicable to the product in its current form. |
| • Evaporation Rate (Water = 1) | Solvent mixture only > 1. |
| • Flammability | Not determined. |
| • Upper/Lower Explosive Limits | Not applicable. |
| • Vapor Pressure | Not determined. |
| • Vapor Density | Not determined. |
| • Relative Density | Not determined. |
| • Solubility | Not determined. |
| • Partition Coefficient/n-octanol/water | Not determined. |
| • Autoignition Temperature | Not determined. |
| • Decomposition Temperature | Not determined. |
| • Viscosity | Not applicable. |

SECTION 10: STABILITY AND REACTIVITY

10.1 REACTIVITY

- Not reactive under typical conditions of use or handling.

10.2 CHEMICAL STABILITY

- Normally stable under standard temperatures and pressures.

10.3 POSSIBILITY OF HAZARDOUS REACTIONS

- Product is not self-reactive, water-reactive, or air-reactive; it will not undergo hazardous polymerization.

10.4 CONDITIONS TO AVOID

- Avoid contact with incompatible chemicals.

10.5 INCOMPATIBLE MATERIALS

- Strong oxidizing agents.

10.6 HAZARDOUS DECOMPOSITION PRODUCTS

- Products of thermal decomposition include oxides of carbon (i.e., carbon monoxide, carbon dioxide.)

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 INFORMATION ON TOXICOLOGICAL EFFECTS

• ACUTE TOXICITY:

- **TOXICOLOGY DATA:** The following data are available for the hazardous components in this product listed in Section 3 (Composition/Information on Ingredients).

SOLVENT COMPONENT 1

Dermal LD50 (rabbit): >2000 mg/kg;
Inhalation LC50 (rat): >3078.44 ppm/4H
Oral LD50 (rat) : >5000 mg/kg

- **SENSITIZATION:** The components of this product are not reported to have skin or respiratory sensitization effects.
- **REVIEW OF ACUTE SYMPTOMS AND EFFECTS BY ROUTE OF EXPOSURE:** See Section 2 (Hazards Information) and Section 4 (First-Aid Measures) for additional details.
 - **EYES:** Contact with solvent mixture may cause eye irritation.
 - **SKIN:** Prolonged contact with solvent mixture may cause mild skin irritation.
 - **INHALATION:** Inhalation of 1000 ppm of the solvent component of this product can irritate the respiratory tract. An open pouch liberates approximately 6-8 ppm of these components.
 - **INGESTION:** Ingestion of product may cause discomfort and irritation of the tissues of the digestive system.

• CHRONIC TOXICITY:

- **CARCINOGENICITY STATUS:** None of the components of this product are listed as carcinogen by OSHA, IARC or NTP.
 - **REPRODUCTIVE TOXICITY INFORMATION:** This product is not reported to cause reproductive effects under typical circumstances of exposure.
 - **MUTAGENIC EFFECTS** The components of this product are not reported to cause mutagenic effects under typical circumstances of exposure.
 - **SPECIFIC TARGET ORGAN TOXICITY – SINGLE EXPOSURE:** Not applicable.
 - **SPECIFIC TARGET ORGAN TOXICITY – REPEATED EXPOSURE:** Not applicable.
 - **ASPIRATION HAZARD:** Not applicable.
 - **TOXICOLOGICALLY SYNERGISTIC PRODUCTS:** None known.
- ADDITIONAL TOXICOLOGY:** Not applicable.

SECTION 12: ECOLOGICAL INFORMATION

12.1 TOXICITY

- This product has been tested, and has been demonstrated to not be harmful to the aquatic environment.
- The following test data is available:
 - **PRODUCT:** Title 22 CCR Fathead Minnow Bioassay Test- LC50 > 750 mg/L

12.2 PERSISTENCE AND DEGRADABILITY

- The synthetic rubber component of this product is extremely stable. The solvent mixture component of this product will slowly decompose in the environment, releasing a variety of organic compounds.

12.3 BIOACCUMULATIVE POTENTIAL

- This product is not anticipated to bioaccumulate significantly.

12.4 MOBILITY IN SOIL

- It is to be expected this product will have limited mobility in soil.

12.5 OTHER ADVERSE EFFECTS

- None reported.

SECTION 13: DISPOSAL CONSIDERATION

13.1 WASTE TREATMENT METHODS

1. **WASTE HANDLING RECOMMENDATIONS:** Prepare, transport, treat, store, and dispose of waste product according to all applicable local, U.S. State and U.S. Federal regulations, the applicable Canadian standards, or the appropriate standards of the nations of the European Community.

13.2 DISPOSAL CONSIDERATIONS

- EPA RCRA WASTE CODE: Not applicable.

SECTION 14: TRANSPORT INFORMATION

14.1 DANGEROUS GOODS BASIC DESCRIPTION AND OTHER TRANSPORT INFORMATION

- **DEPARTMENT OF TRANSPORTATION HAZARDOUS MATERIALS SHIPPING REGULATIONS:**

UN/NA Number	Proper Shipping Name	Packing Group	Hazard Class	Label	North American Emergency Response Guide #	Marine Pollutant Status
NOT APPLICABLE						

- **IATA DESIGNATION:** This product is not regulated as dangerous goods by the International Air Transport Association.
- **IMO DESIGNATION:** This product is not regulated as dangerous goods by the International Maritime Organization.

14.2 ENVIRONMENTAL HAZARDS

- None described, as related to transportation.

14.3 SPECIAL PRECAUTIONS FOR USERS

- Not applicable.

14.4 TRANSPORT IN BULK

- Not applicable.

SECTION 15: REGULATORY INFORMATION

15.1 SAFETY, HEALTH, AND ENVIRONMENTAL REGULATIONS SPECIFIC FOR THE PRODUCT

- **OTHER IMPORTANT U.S. REGULATIONS**

- **U.S. SARA HAZARD CATEGORIES (SECTION 311/312, 40 CFR 370-21):** Eye Damage/Irritation.
- **U.S. CERCLA REPORTABLE QUANTITY (RQ):** SOLVENT COMPONENT 1: 1000 lb/454 kg RQ
- **U.S. SARA 313:** No component is subject to the reporting requirements.
- **U.S. TSCA INVENTORY STATUS:** The compounds in this product are listed in the TSCA inventory.
- **CALIFORNIA SAFE DRINKING WATER ACT (PROPOSITION 65) STATUS:** Not applicable.

- **INTERNATIONAL REGULATIONS**

- **CANADIAN REGULATORY STATUS: CANADIAN REGULATORY STATUS:** The product is classified as hazardous under Hazardous Products Regulations (SOR-2015-17). Refer to Section 2 for classification and hazard information.

SECTION 16: OTHER INFORMATION

16.1 INDICATION OF CHANGE

- **SUPERCEDES:** January 12, 2015
- **DATE OF REVISION:** February 19, 2020
- **CHANGE INDICATED:** **CHANGE INDICATED:** Amendment of hazard classification, inclusion of aquatic toxicity information, and update regulatory information.

16.2 KEY LITERATURE REFERENCES AND SOURCES FOR DATA

- SAFETY DATA SHEETS FOR COMPONENT PRODUCTS.
- Federal OSHA Hazard Communication Standard: 29 CFR 1910.1200.
- CHEMIDPlus: <https://chem.nlm.nih.gov/chemidplus/chemidlite.jsp>
- ECHA -European Chemicals Agency: <https://echa.europa.eu/>

16.3 HAZARDOUS MATERIALS CLASSIFICATION SYSTEM

Health	1
[REDACTED]	1
Physical Hazard	0
Protective Equipment	B [Safety Glasses and Gloves (Prolonged Contact or Spill Response)]

16.4 DISCLAIMER.

- ConTech Systems, Ltd. provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate precautionary handling of the materials contained in this product by a properly trained person using this product. ConTech Systems, Ltd. shall not be held liable for any damage resulting from handling or use.

16.5 ABBREVIATIONS AND ACRONYMS

ALL SECTIONS: **OSHA:** U.S. Federal Occupational Safety and Health Administration. **WHMIS:** Canadian Workplace Hazardous Materials Standard. **GHS:** Globally Harmonized System of Classification of Chemical Substances. **FIFRA:** EPA's Federal Insecticide, Fungicide, and Rodenticide Act

SECTION 3: **CAS Number:** Chemical Abstract Service Number, which is used by the American Chemical Society to uniquely identify a chemical.

SECTION 5: **NFPA:** National Fire Protection Association. **NFPA FLAMMABILITY CLASSIFICATION:** The NFPA uses the flash point (F.P.) and boiling point (BP) to classify flammable or combustible liquids. Class IA: F.P. below 73°F and BP below 100°F. Class IB: F.P. below 73°F and BP at or above 100°F. Class IC: F.P. at or above 73°F and BP at or above 100°F. Class II: F.P. at or above 100°F and below 140°F. Class IIIA: F.P. at or above 140°F and below 200°F. Class IIIB: F.P. at or above 200°F. **NFPA HAZARDOUS MATERIALS RATING:** This is a rating system used to summarize physical and health hazards to firefighters. 0 = No Significant Hazard. 1 = Slight Hazard. 2 = Moderate Hazard. 3 = Severe Hazard. 4 = Extreme Hazard.

SECTION 8: **NE:** Not established. **ACGIH:** American Conference of Government Industrial Hygienists. **IWA:** Time-Weighted Average (over an 8-hour work day). **STEL:** Short-Term Exposure Limit (15-minute average, no more than 4-times daily and each exposure separated by one-hour minimally). **C:** Ceiling Limit (concentration not to be exceeded in a work environment). **PEL:** Permissible Exposure Limit. **NIOSH:** National Institute of Occupational Safety and Health. **REL:** Recommended Exposure Limit. **IDLH:** Immediately Dangerous to Life and Health Concentrations. *Note:* In July 1992, a court ruling vacated the more protective PELs set by OSHA in 1989. Because OSHA may enforce the more protective levels under the "general duty clause", both the current and vacated levels are presented in this document. **ppm:** Parts per Million. **mg/m³:** Milligrams per cubic meter. **mppcf:** Millions of Particles per Cubic Foot. **BEI:** Biological Exposure Limit. **CA:** California State. Table AC-1 Permissible Exposure Limits for Chemical Contaminants.

SECTION 9: **pH:** Scale (0 to 14) used to rate the acidity or alkalinity of aqueous solutions. For example, a pH value of 0 indicates a strongly acidic solution, pH of 7 indicates a neutral solution, and a pH value of 14 indicates an extremely basic solution. **FLASH POINT:** Temperature at which a liquid generates enough flammable vapors so that ignition may occur. **AUTOIGNITION TEMPERATURE:** Temperature at which spontaneous ignition occurs.

SECTION 9 (Continued): **LOWER EXPLOSIVE LIMIT (LEL):** The minimal concentration of flammable vapors in air which will sustain ignition. **UPPER EXPLOSIVE LIMIT (UEL):** The maximum concentration of flammable vapors in air which will sustain ignition. **≈:** Approximately symbol. **VOC:** Volatile Organic Compound.

SECTION 11: **CARCINOGENICITY STATUS:** **NTP:** National Toxicology Program. **IARC:** International Agency for Research on Cancer. **REPRODUCTIVE TOXICITY INFORMATION:** **Mutagen:** Substance capable of causing chromosomal damage to cells. **Embryotoxin:** Substance capable of damaging the developing embryo in an overexposed female. **Teratogen:** Substance capable of damaging the developing fetus in an overexposed female. **Reproductive toxin:** Substance capable of adversely affecting male or female reproductive organs or functions. **TOXICOLOGY DATA:** **LD_{xx}** or **LC_{xx}:** The Lethal Dose or Lethal Concentration of a substance which will be fatal to a given percentage (xx) of exposed test animals by the designate route of administration. This value is used to assess the toxicity of chemical substances to humans. **TD_{xx}** or **TC_{xx}:** The Toxic Dose or Toxic Concentration of a substance which will cause an adverse effect to a given percentage (xx) of exposed test animals by the designate route of administration.

SECTION 12: **EC₅₀:** Effect Concentration (on 50% of study group); **BOD:** Biological Oxygen Demand.

SECTION 13: **RCRA:** Resource Conservation and Recovery Act. The regulations promulgated under this Act are found in 40 CFR, Sections 260 ff, and define the requirements of hazardous waste generation, transport, treatment, storage, and disposal. **EPA RCRA Waste Codes:** Defined in 40 CFR Section 261.

SECTION 15: **CERCLA:** Comprehensive Environmental Response Compensation and Liability Act (a.k.a. "Superfund") and **SARA:** (Superfund Amendment and Reauthorization Act). The regulations promulgated under this Act are located under 40 CFR 300 ff. and provide "community right-to-know" requirements. **TSCA:** Toxic Substances Control Act. Rules regulating the manufacture and sale of chemicals found in 40 CFR 700-766.

SECTION 16: **HAZARDOUS MATERIALS IDENTIFICATION SYSTEM RATING:** This is a rating system used by industry to summarize physical and health hazards to chemical users and was originally developed by the National Paint and Coating Association. 0 = No Significant Hazard. 1 = Slight Hazard. 2 = Moderate Hazard. 3 = Severe Hazard. 4 = Extreme Hazard.