

MATERIAL SAFETY DATA SHEET

Section 1: IDENTIFICATION OF THE MATERIAL

Product name: Zip Tube
Part number: ZT108/27, ZT136/30, ZT180/50, ZT36/10, ZT55/13, ZT85/20
Other names: Heat Shrinkable Wrap Around Sleeve (HRSL)
Recommended use: Cable Repairs, Protection of Cable Joints, Corrosion protection

Section 2: HAZARD IDENTIFICATION

This material consists primarily of high molecular weight polymers which are not expected to be hazardous

Hazard classification: Not expected to be hazardous
Risk phrases: Not specified
Safety phrase: Not specified

Eye Contact

Contact with molten material or adhesive may cause thermal burns.

Skin Contact

This product is not expected to be a skin irritant. Contact with the molten material or adhesive may cause thermal burns. No harmful effects are expected from skin absorption of this product.

Ingestion (Swallowing)

Ingestion of this product is highly unlikely. There is insufficient information available on this material to predict the effects from ingestion.

Inhalation (Breathing)

In common with most organic materials, thermal degradation and combustion byproducts may be toxic and should not be inhaled. (See Comments below and the Thermal Degradation and Combustion Byproducts Section for more specific information.)

Chronic Health Effects:

None of the ingredients to which users may be exposed and which are present at equal to or greater than 0.1% of the product, are listed by OSHA, NTP, or IARC as suspect carcinogens.

Comments

Overheating the product to charring or burning may produce vapors that may cause eye, skin, nose and throat irritation. Persons with pre-existing eye, skin, or respiratory disorders (e.g., asthma conditions) may be more susceptible to the effects of these vapors.

Section 3: COMPOSITION/INFORMATION ON INGREDIENTS

Article-No. / Material-No.	Substances CAS-No.	Basic substances name
PE	9002-88-4	Polyethylene
EVA	24937-78-8	Ethylene-vinyl acetate copolymer
Filler	14807-96-6	Talc
Colorant	1333-86-4	Carbon black
Anti oxidant	6683-19-8	Pentaerythritol tetrakis(3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate)

ADHESIVE DESCRIPTION

Article-No. / Material-No.	Substances CAS-No.	Basic substances name
EVA	24937-78-8	Ethylene-vinyl acetate copolymer
PE wax	9002-88-4	Polyethylene
Rosin	8052-10-6	Modified tall oil
Anti oxidant	6683-19-8	Pentaerythritol tetrakis(3-(3,5-di-tert-butyl-4-hydroxyphenyl)propionate)

TEMPERATURE WARNING PAINT DESCRIPTION

Article-No. / Material-No.	Substances CAS-No.	Basic substances name
Pathalic acid	88-99-3	Pathalic acid
EDTA	60-00-4	Ethylenediaminetetraacetic acid
Aquilineblue	147-14-8	(29H,31H-phthalocyaninato(2-)-N29,N30,N31,N32)copper

Section 4: FIRST AID MEASURES

If Ingested:

Not a normal route of exposure. However, if swallowed and symptoms develop, seek medical attention.

If in eyes:

If eye irritation occurs, flush with water for at least 15 minutes. Seek medical attention.

If on skin:

If molten adhesive/mastic contacts skin, cool immediately in water. Do not attempt to remove material from the skin - treat as a burn and seek medical attention.

If inhaled:

If respiratory symptoms or other symptoms of exposure develop, move victim to fresh air. If symptoms persist, seek medical attention. If breathing difficulties develop, oxygen should be administered by qualified personnel. Seek immediate medical attention. If victim is not breathing, immediately begin artificial respiration. Keep victim warm and quiet; seek immediate medical attention.

(Indication of medical attention and any special treatment needed, notes to physician should include description of most important symptoms, acute and delayed)

Section 5: FIRE FIGHTING MEASURES

Suitable Extinguishing media:

Carbon dioxide, dry chemical, chemical foam, or water fog. Using a direct, straight water stream may tend to spread a fire.

Hazards from Combustion Products:*Thermal Degradation and Combustion Byproducts*

In common with most organic materials, degradation and combustion byproducts may be toxic and should not be inhaled. Thermal degradation is not significant at temperatures achieved during proper installation, as directed by product installation guides. At temperatures higher than those recommended for proper installation, most significantly if the product burns, the thermal degradation and combustion byproducts may include, but are not limited to, carbon monoxide, carbon dioxide, organic acids, aldehydes and alcohols, oxides of nitrogen, sulfur, and silicon, acetic acid, tetrahydrofuran, acrolein, vinyl acetate, and aromatic and aliphatic hydrocarbons.

Precautions for fire fighters:**Special protective equipment:**

Firefighters should wear self-contained breathing apparatus with a full face piece operated in the positive demand mode when fighting fires.

Unusual Fire and Explosion Hazards:

Toxic fumes may be given off in a fire. See also sections on Thermal Degradation and Combustion Byproducts and Other Precautions.

Section 6: ACCIDENTAL RELEASE MEASURES

Emergency Procedures:

To prevent the danger of slips or falls, sweep or gather up material and place in proper container for disposal or recovery. Immediately collect released resin to prevent environmental contamination. Wear appropriate personal protection when responding.

Methods and Materials for containment and clean up:

Sweep up and collect in a suitable container for disposal or reuse.

Section 7: HANDLING AND STORAGE

Precautions for safe handling:

Avoid any vapors given off if the product is heated to decomposition, as shown by a darkening and browning. Avoid contact with molten material. Heat-resistant gloves are required if hot products are handled after installation. Do not consume food, beverages or tobacco in the immediate work area. Wash hands before eating, drinking or smoking.

Conditions for safe storage, including any incompatibilities:

Keep away from heat sources.

Keep away from combustible substances.

Section 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

National Exposure standards:*Exposure limits*

There are no established exposure limits for polymer mixtures.

Biological limit values:

Not established

Engineering controls:

Hot melts should be used with good ventilation. At the application temperature use of local exhaust over the preparing reservoir is encouraged.

Personal Protective Equipment:

Respiratory Protection (Specify Type) –

Not normally required. Use NIOSH/MSHA approved respirator if conditions warrant.

Protective Gloves –

At elevated temperatures prevent contact by wearing thermally protective gloves and a long sleeved shirt. Provide a cold water source for burn treatment.

Eye Protection –

Wear safety glasses to reduce the potential for eye contact; a face shield is appropriate if splashing is likely. Have eye washes available where eye contact can occur.

Other Protective Clothing or Equipment -

Section 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Plastic tubing and moulded parts in a variety of shapes.
Odour:	No Odour
pH:	Not established
Vapour Pressure (MMHG) @20°C:	Not Applicable
Vapour Density:	Not applicable
Boiling point/range:	Not applicable
Freezing/melting point:	See installation guide
Solubility:	Not applicable
Specific gravity (H2O=1) or density:	Not established
Flashpoint:	Not applicable
Upper flammable (explosive) limits in air:	Not applicable
Lower flammable (explosive) limits in air:	Not applicable
Auto ignition temperature:	Not applicable
Evaporation Rate (Butyl Acetate = 1):	Not applicable
Volatile organic compounds (VOC) content:	Not applicable

Section 10: STABILITY AND REACTIVITY

Chemical Stability:

This product is stable under normal conditions at room temperatures.

Conditions to avoid:

Avoid overheating of product and open flame.

Incompatible Materials:

Strong oxidizers, peroxides, acids and reducing agents.

Hazardous decomposition products:

Not established

Hazardous reactions:

Will not occur. No known polymerization conditions to avoid.

Section 11: TOXICOLOGICAL INFORMATION

Acute and Chronic health affects:

Possible routes of exposure:

Range of affects following exposure:

Dose, concentration or conditions of exposure likely to cause injury:

Delayed affects:

Relevant negative data:

Section 12: ECOLOGICAL INFORMATION

Ecotoxicity: No available data

Persistence and degradability: No available data

Mobility: No available data

Section 13: DISPOSAL CONSIDERATION

Disposal methods and containers:

Not established

Special precautions for landfill or incineration:

Not established

Dispose in accordance with all local, state and federal regulation. If there are local regulations covering the controlled incineration of halogenated materials, then all halogen-containing products will be subject to such regulations

Section 14: TRANSPORT INFORMATION

These products are non-hazardous under department because there are no applicable shipping regulations for these products, labels are not required on the outside shipping container for these products and all products may be shipped through the U.S postal services.

Domestic Highway

UN number: Not applicable

UN Proper shipping name: Not applicable

Class and subsidiary risk: Not applicable

Packing group: Not applicable

Special precaution for user: Not applicable

Hazchem code: Not applicable

Section 15: REGULATORY INFORMATION

The regulatory status of a material (including its ingredients) under relevant Australian health, safety and environmental legislation:

No available data

Section 16: OTHER INFORMATION

Date of Preparation/last Revision of the MSDS:

20 March 2010

New Zealand Emergency Telephone: 111

New Zealand National Poisons Centre Telephone: 0800 POISON (0800 764 766)

The responsibility to provide a safe workplace remains with the user. The user should consider the health hazards and safety information contained herein as a guide and should take those precautions required in an individual operation to instruct employees and to develop work practice procedures for a safe work environment.

DISCLAIMER: The information contained herein, is to the best of our knowledge and belief; accurate. However, because the condition of handling and use are beyond our control, **we make no guarantee of results, and assume no liability for damages incurred by the use of this material. It is the responsibility of the user to comply with all federal, state and local laws and regulations.**