

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Medium Voltage Fusion Tape, EXRM-3020
PRODUCT CODES: MVFT, EXRM-3020

RAY6005

MANUFACTURER: Tyco Electronics Corporation
DIVISION: Energy
ADDRESS: 2901 Fulling Mill Road
Middleton, PA 17105-3608

SUPPLIERS
EMERGENCY TELEPHONE NUMBERS:

US: CHEMTREC 1-800-424-9300
CN: CHEMTREC 1-800-424-9300
Outside North America: 1-703-527-3887 (Collect calls accepted)

NON-EMERGENCY HEALTH/SAFETY INFORMATION:

North America: 1-800-327-6996

CHEMICAL FAMILY: These products are self-fusing silicone tapes. The EXRM product is reinforced with fibrous glass (synthetic vitreous fibres).

PRODUCT USE: Fusion tape for use with medium voltages. Consult the Tyco Electronics product use instructions that accompany the product.

This product is considered an Article thus it is not regulated under US-OSHA; CAN-WHMIS; IOSH; ISO; UK-CHIP; or EU Directives (67/548/EEC-Dangerous Substance Labeling, 98/24/EC-Chemical Agents at Work, 99/45/EC-Preparation Labeling, 2001/58/EC-MSDS Content, and 1907/2006/EC-REACH), and an MSDS is not required for this product considering that when used as recommended or intended, or under ordinary conditions, it should not present a health and safety exposure or other hazard. If overheated, charred, burned, or shredded the health and safety information presented below may apply.

Additional Information

This product is not intended for all harsh environments, such as those containing solvents, extreme temperatures or pressures. Please request information if considering non-STP, harsh-conditions or use beyond current product labelling.

SECTION 2: HAZARDS IDENTIFICATION

GHS Classification: Not applicable

Health	Environmental	Physical
Acute Toxicity – Not listed (NL) Eye Corrosion – NL Skin Corrosion – NL Skin Sensitization – NL Mutagenicity – NL Carcinogenicity – NL Reproductive/Developmental – NL Target Organ Toxicity (Repeated) – NL	Aquatic Toxicity – NL	NFPA – NL CN – NL EU – NL

GHS Label: No Label Required for Products as Supplied

Symbols: Not applicable

Hazard Statements	Precautionary Statements
Not applicable	Not applicable

EMERGENCY OVERVIEW:

This product is not hazardous as supplied or as used in normal applications in accordance with the product use instructions. Products may emit hazardous thermal decomposition products if overheated or burnt. See Section 10.

POTENTIAL HEALTH EFFECTS:

- EYES:** No health effects are expected related to normal use of this product. Exposure to overheated or burnt product may result in eye irritation.
- SKIN:** Repeated or prolonged contact may cause mild skin irritation. Skin exposure to fibrous glass fibres may cause chronic itching. This is unlikely based on the fact that the fibres are encapsulated in silicone rubber.
- INGESTION:** No health effects are expected related to normal use of this product.
- INHALATION:** No health effects are expected related to normal use of this product. Exposure to overheated or burnt product may result in upper respiratory irritation. Machining or grinding on fibrous glass-reinforced product may result in inhalation of fibrous glass fibres.

ACUTE HEALTH HAZARDS:

Repeated or prolonged contact may cause mild skin irritation.

CHRONIC HEALTH HAZARDS:

Skin exposure to fibrous glass fibres may cause chronic itching. This is unlikely based on the fact that the fibres are encapsulated in silicone rubber.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE:

No health effects are expected related to normal use of this product.

Additional Information

None.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**INGREDIENTS (Chemical/Common Names):**

Silicone rubber and polymer liner and fibrous glass (EXRM-3020 only)

CAS No.:

NA

% by Wt:

100

EC No.:

NA

NA – Not applicable/ND – Not determined

Additional Information

These ingredients reflect components of the finished product related to performance of the product as distributed into commerce.

SECTION 4: FIRST AID MEASURES

- EYE CONTACT:** Flush eyes with large amounts of water. If symptoms develop, seek medical attention.
- SKIN CONTACT:** Immediately wipe material from skin and wash affected area(s) with plenty of mild soap and water. If symptoms persist, seek medical attention.
- INGESTION:** No need for first aid is anticipated related to normal use of this product.
- INHALATION:** If breathing difficulties develop, remove person to fresh air. If symptoms persist, seek medical attention.

Additional Information

None.

SECTION 5: FIRE-FIGHTING MEASURES**SUITABLE EXTINGUISHING MEDIA:**

Dry chemical, carbon dioxide, water, foam.

SPECIAL FIRE FIGHTING PROCEDURES & PROTECTIVE EQUIPMENT:

Avoid breathing vapours. Use full protective equipment (bunker gear) and self-contained breathing apparatus. Cool exposed containers with water spray.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

None Known.

SPECIFIC HAZARDS IN CASE OF FIRE:

None Known.

Additional Information
 None.

SECTION 6: ACCIDENTAL RELEASE MEASURES
PERSONAL PRECAUTIONS:

Avoid contact with skin, especially if product has been overheated or burnt.

ENVIRONMENTAL PRECAUTIONS:

Prevent material from entering sewers and waterways.

SPILL CONTAINMENT & CLEANUP METHODS/MATERIALS:

Sweep or shovel material and place in approved container for disposal.

Additional Information
 None.

SECTION 7: HANDLING AND STORAGE
PRECAUTIONS FOR SAFE HANDLING:

Do not heat above 149 °C (300 °F). Wear personal protective equipment specified in Section 8.

STORAGE PRECAUTIONS (e.g.; Incompatibilities):

Store material in original packaging away from heat, sparks, or open flame.

Additional Information
 None.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION
ENGINEERING CONTROLS/SYSTEM DESIGN INFORMATION:

Use with adequate ventilation.

VENTILATION:

General dilution ventilation is acceptable. Use local exhaust ventilation in poorly ventilated areas.

RESPIRATORY PROTECTION:

Not required for normal conditions of use. Wear a NIOSH-approved air-purifying respirator if exposure levels may be exceeded, such as when overheating is likely. See Section 5 for special firefighting procedures and Section 10 for thermal decomposition products.

EYE PROTECTION:

Wear protective safety glasses with side-shields.

SKIN PROTECTION:

Wear disposable gloves as needed to minimize skin contact.

OTHER PROTECTIVE CLOTHING OR EQUIPMENT:

None required under normal use conditions.

EXPOSURE GUIDELINES & LIMITS:

OSHA	Permissible Exposure Limit (PEL/TWA)	NE
ACGIH	Threshold Limit Value (TLV)	Synthetic vitreous fibres 1 fibre/cc
Quebec	Permissible Exposure Value (PEV)	Synthetic vitreous fibres 1 fibre/cc
Ontario	Occupational Exposure Level (OEL)	Synthetic vitreous fibres Inhalable dust: 5 mg/m ³
Netherlands	Maximaal Aanvaarde Concentratie (MAC)	NE
Germany	Maximale Arbeitsplatzkonzentrationen (MAK)	NE
United Kingdom	Occupational Exposure Standard (OES)	NE

TWA – 8-Hour Time Weighted Average/ NE – Not Established

Additional Information

- Fibres are encapsulated in silicone rubber and will not become airborne during installation according to instructions.



- Not Included as International Trade.
- May be Required to meet Domestic Requirements for a Specific Destination(s).

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE:	Gray or Red silicone rubber on a polymer liner
ODOR:	Slightly sweet
ODOR THRESHOLD:	Not determined (ND)
PHYSICAL STATE:	Solid
pH:	Not applicable (NA)
BOILING POINT:	ND
MELTING POINT:	ND
FREEZING POINT:	ND
VAPOR PRESSURE:	Nil
VAPOR DENSITY (AIR = 1):	ND
SPECIFIC GRAVITY (H ₂ O = 1):	1.2 (silicone rubber)
EVAPORATION RATE:	ND
SOLUBILITY IN WATER:	Nil
FLASH POINT:	ND
AUTO-IGNITION TEMPERATURE:	NA
LOWER EXPLOSIVE LIMIT (LEL):	NA
UPPER EXPLOSIVE LIMIT (UEL):	NA
PARTITION COEFFICIENT:	NA
VISCOSITY (poise @ 25° C):	Not Available
DECOMPOSITION TEMPERATURE:	149 °C (300 °F)

FLAMMABILITY/HMIS HAZARD CLASSIFICATIONS (US/CN/EU):

HEALTH: 0

FLAMMABILITY: 0

REACTIVITY: 0

Additional Information

None.

SECTION 10: STABILITY AND REACTIVITY

STABILITY:	This product is stable under normal conditions at ambient temperature.
INCOMPATIBILITY (MATERIAL TO AVOID):	None known.
HAZARDOUS DECOMPOSITION OR BY-PRODUCTS:	Thermal decomposition will produce carbon monoxide, carbon dioxide, silicon dioxide, formaldehyde, chlorine compounds, carbon compounds and metal oxides.
HAZARDOUS POLYMERIZATION:	Will not occur.
CONDITIONS TO AVOID:	No information available.

Additional Information

None.

SECTION 11: TOXICOLOGICAL INFORMATION

ACUTE TOXICITY (Test Results Basis and Comments):

No data available.

SUBCHRONIC/CHRONIC TOXICITY (Test Results and Comments):

No data available.

Additional Information

- No chronic toxicity data available.
- The ingredients in this product, present at equal to or greater than 0.1% of the product, are not listed by OSHA, NTP, or IARC as suspect carcinogens.
- If overheated or burned, this product may produce formaldehyde, which is listed by OSHA, NTP, IARC, and ACGIH as a

carcinogen or a suspect carcinogen.

SECTION 12: ECOLOGICAL INFORMATION
PERSISTENCE & DEGRADABILITY:

No data available on biodegradation.

BIO-ACCUMULATIVE POTENTIAL (Including Mobility):

No data available on bioaccumulation.

AQUATIC TOXICITY (Test Results & Comments):

No data available on aquatic toxicity.

Additional Information

- No known effects on stratospheric ozone depletion.
- Volatile organic compounds: 0% (by Volume)
- Water Endangering Class (WGK): NA

SECTION 13: DISPOSAL CONSIDERATIONS
WASTE DISPOSAL
METHOD:
HAZARDOUS WASTE
CLASS/CODE:

Follow local, State/Provincial, and Federal/National regulations applicable to as-used; end-of-life characteristics to be determined by end-user.

US - Not applicable to finished product as manufactured for distribution into commerce.
 CN - Not applicable to finished product as manufactured for distribution into commerce.
 EWC - Not applicable to finished product as manufactured for distribution into commerce.

Additional Information

Not Included - Dispose/Recycle as allowed by local jurisdiction for the end-of-life characteristics as-disposed.

SECTION 14: TRANSPORT INFORMATION
GROUND - US-DOT/CAN-TDG/EU-ADR/APEC-ADR:

Proper Shipping Name: Silicone Rubber Tape - Not Regulated as Dangerous Goods

Hazard Class: NA

Packing Group: NA

ID Number: NA

Labels: NA

AIRCRAFT - ICAO-IATA:

Proper Shipping Name: Silicone Rubber Tape - Not Regulated as Dangerous Goods

Hazard Class: NA

Packing Group: NA

ID Number: NA

Labels: NA

VESSEL - IMO-IMDG:

Proper Shipping Name: Silicone Rubber Tape - Not Regulated as Dangerous Goods

Hazard Class: NA

Packing Group: NA

ID Number: NA

Labels: NA

Additional Information

- Transport requires proper packaging and paperwork, including the Nature and Quantity of goods, per applicable origin/destination/customs points as-shipped.
- Not restricted for any mode of international transport as finished goods.
- Not a Marine Pollutant as-shipped per IMO/IMDG.

SECTION 15: REGULATORY INFORMATION
INVENTORY STATUS:

All components are listed on the TSCA; EINECS/ELINCS; and DSL, unless noted otherwise below.

U.S. FEDERAL REGULATIONS:

TSCA Section 8b – Inventory Status: All chemicals comprising this product are either exempt or listed on the TSCA Inventory.

TSCA Section 12b – Export Notification: The finished product contains chemicals subject to TSCA Section 12b export notification.

Chemical

None

CAS #

NA

CERCLA (COMPREHENSIVE RESPONSE COMPENSATION, AND LIABILITY ACT)

Chemicals present in the product which could require reporting under the statute:

Chemical

None

CAS #

NA

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

The finished product contains chemicals subject to the reporting requirements of Section 313 of SARA Title III.

Chemical

None

CAS #

NA

% wt

NA

CERCLA SECTION 311/312 HAZARD CATEGORIES: Note that the finished product is exempt from these regulations.

Fire Hazard	No
Pressure Hazard	No
Reactivity Hazard	No
Immediate Hazard	No
Delayed Hazard	No

STATE REGULATIONS (US):
California Proposition 65

The following chemicals identified to exist in the finished product as distributed into commerce are known to the State of California to cause cancer, birth defects, or other reproductive harm:

Chemical

Benzene

CAS #

71-43-2

% Wt

0.0002

Toluene

108-88-3

0.0012

California Consumer Product Volatile Organic Compound Emissions

This Product is not regulated as a Consumer Product for purposes of CARB/OTC VOC Regulations, as-sold for the intended purpose and into the industrial/Commercial supply chain.

INTERNATIONAL REGULATIONS (Non-US):
Canadian Domestic Substance List (DSL)

All ingredients remaining in the finished product as distributed into commerce are included on the Domestic Substances List.

WHMIS Classifications

Not Regulated.

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the Controlled Products Regulations.

NPRI and Ontario Regulation 127/01

This product contains the following chemicals subject to the reporting requirements of Canada NPRI +/-or Ont. Reg. 127/01:

Chemical

None

CAS #

NA

% Wt

NA

European Inventory of Existing Commercial Chemical Substances (EINECS)

All ingredients remaining in the finished product as distributed into commerce are exempt from, or included on, the European Inventory of Existing Commercial Chemical Substances.

European Communities (EC) Hazard Classification according to directives 67/548/EEC and 1999/45/EC.

R-Phrases

Not applicable

S-Phrases

Not applicable

Additional Information

This product may be regulated under additional regulations and laws not identified above, such as for uses other than described or as-designed/as-intended by the manufacturer, or for distribution into specific domestic destinations.



Tyco Electronics

MATERIAL SAFETY DATA SHEET

RAY6005

(US, CN, EU Version for International Trade)

SECTION 16: OTHER INFORMATION

OTHER INFORMATION:

Distribution into Quebec to follow Canadian Controlled Product Regulations (CPR) 24(1) and 24(2).

Distribution into the EU to follow applicable Directives to the Use, Import/Export of the product as-sold.

SOURCES OF INFORMATION:

International Agency for Research on Cancer (2007) *Agents Reviewed By The IARC Monographs, Volumes 1-96* and IARC

(1987) *IARC Monographs on the Evaluation of Carcinogenic Risks to Humans: Overall Evaluations of Carcinogenicity: An updating of IARC Monographs Volumes 1-42, Supplement 7*. Lyon, France.

Ontario Ministry of Labour Regulation 654/86. Regulations Respecting Exposure to Chemical or Biological Agents.

National Institute for Occupational Safety and Health, U.S. Centers for Disease Control and Prevention *Registry of Toxic Effects of Chemical Substances (RTECS)*. Cincinnati, Ohio.

European Commission Directorate General Joint Research Centre/European Chemicals Bureau (2007) *European Chemical Substances Information System (ESIS), European Inventory of Existing Commercial Chemical Substances (EINECS), and International Uniform Chemical Information Database (IUCLID) Chemical Data Sheets*.

Other sources were consulted for country-specific or provincial occupational exposure limits. These sources are believed to be accurate, but the user should verify current federal and provincial regulations.

MSDS/SDS PREPARATION INFORMATION:

DATE OF ISSUE: **December 19, 2008**

SUPERCEDES: **Not applicable**

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