KRIMPA-SEAL

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DIVISION: ELECTRICAL PRODUCTS DIVISION TRADE NAME:

MW HEAT SHRINK TUBING - COLORS

ID NUMBER/U.P.C.: 80-6108-5593-6 00-51135-37693-5

ISSUED: FEBRUARY 2, 2001 SUPERSEDES: DECEMBER 3, 1997

DOCUMENT: 07-1308-1

ESIVE LINED POLYOLEFIN TUBING	Unknown	100	
. PHYSICAL DATA			
BOILING POINT:	N/A		
VAPOR PRESSURE:	N/A		
VAPOR DENSITY:	N/A		
EVAPORATION RATE:	N/A		
SOLUBILITY IN WATER:	N/A		
SP. GRAVITY:	ca. 1.0 Water = 1		
PERCENT VOLATILE:	N/A		
pH:	N/A		
VISCOSITY:	N/A		
MELTING POINT	N/D		
APPEARANCE AND ODOR: Tubing,	various sizes, cold	ors	

Carbon dioxide, Dry chemical, Foam SPECIAL FIRE FIGHTING PROCEDURES:

Wear full protective clothing, including helmet, self-contained, positive pressure or pressure demand breathing apparatus, bunker coat and pants, bands around arms, waist and legs, face mask, and protective covering for exposed areas of the head.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

None known.

NFPA HAZARD CODES: HEALTH: 0 FIRE: 0 REACTIVITY: 0 UNUSUAL REACTION HAZARD: none

OSHA FIRE HAZARD CLASS: Not applicable



MSDS: MW HEAT SHRINK TUBING - COLORS FEBRUARY 2, 2001

PAGE: 2 of 4

4. REACTIVITY DATA

STABILITY: Stable

INCOMPATIBILITY - MATERIALS TO AVOID:

None known.

HAZARDOUS POLYMERIZATION: Will Not Occur

HAZARDOUS DECOMPOSITION PRODUCTS:

Carbon Monoxide and Carbon Dioxide, Oxides of Sulfur, Aldehydes,

Toxic Vapors, Gases or Particulates

Heating product beyond temperature recommended by instruction sheet Benzene, Toluene,

may cause release of the following compounds: Benzene, Tol Formaldehyde, Acetaldehyde, Acetic Acid, and Vinyl Acetate.

5. ENVIRONMENTAL INFORMATION

SPILL RESPONSE:

Not applicable.

RECOMMENDED DISPOSAL:

Dispose of waste product in a sanitary landfill.

ENVIRONMENTAL DATA:

No data available.

REGULATORY INFORMATION:

Volatile Organic Compounds: N/A. VOC Less H20 & Exempt Solvents: N/A.

Since regulations vary, consult applicable regulations or authorities before disposal.

EPCRA HAZARD CLASS:

FIRE HAZARD: No PRESSURE: No REACTIVITY: No ACUTE: No CHRONIC: No

6. SUGGESTED FIRST AID

EYE CONTACT:

Immediately flush eyes with large amounts of water. Get immediate medical attention.

SKIN CONTACT:

If skin contact with hot material occurs: DO NOT ATTEMPT TO REMOVE MOLTEN MATERIAL. Immediately flush affected area with plenty of cold water and cover with a clean dressing. Have burn treated by a physician.

INHALATION:

If signs/symptoms occur, remove person to fresh air. If signs/symptoms continue, call a physician.

IF SWALLOWED:

Drink two glasses of water. Call a physician.

3M

MSDS: MW HEAT SHRINK TUBING - COLORS FEBRUARY 2, 2001

PAGE: 3 of 4

7. PRECAUTIONARY INFORMATION

EYE PROTECTION:

AVOID EYE CONTACT WITH VAPORS OR SMOKE RESULTING FROM OVERHEATING OR WHEN USED IN CONFINED AREAS.

SKIN PROTECTION:

Avoid skin contact with hot material. Wear appropriate gloves, such as Nomex, when handling this material to prevent thermal burns.

VENTILATION PROTECTION:

Local exhaust is required for operations using large amounts of material. Conduct air monitoring to determine adequacy of ventilation. Use in a well-ventilated area. Provide sufficient ventilation to maintain emissions below recommended exposure limits. If exhaust ventilation is not adequate, use appropriate respiratory protection.

WHEN USING THIS PRODUCT IN A CONFINED SPACE OR WHERE VENTILATION MAY BE INADEQUATE THEN RESPIRATORY PROTECTION MAY BE WORN. INADEQUATE VENTILATION OR CONFINED SPACES WOULD CAUSE VAPORS FROM HEATING OF THIS PRODUCT TO BE PRESENT IN THE USER'S BREATHING ZONE AND MAY CAUSE RESPIRATORY IRRITATION. EXCESSIVE HEATING OF THIS PRODUCT BEYOND THE RECOMMENDED APPLICATION TEMPERATURE OF 275 DEGREES FAHRENHEIT IS NOT RECOMMENDED AND MAY RESULT IN THERMAL DEGRADATION AND DECOMPOSITION PRODUCTS WHICH MAY RESULT IN ADVERSE HEALTH EFFECTS.

RESPIRATORY PROTECTION:

Avoid breathing of fumes. Select one of the following NIOSH approved respirators based on airborne concentration of contaminants and in accordance with OSHA regulations: Half-mask organic vapor respirator with dust/mist prefilter.

PREVENTION OF ACCIDENTAL INGESTION:

Wash hands after handling and before eating.

RECOMMENDED STORAGE:

Store at room temperature. Keep out of the reach of children.

FIRE AND EXPLOSION AVOIDANCE:

Not applicable.

EXPOSURE LIMITS

INGREDIENTS VALUE UNIT TYPE AUTH SKIN*
ADHESIVE LINED POLYOLEFIN TUBING NONE NONE NONE NONE

* SKIN NOTATION: Listed substances indicated with "Y" under SKIN refer to the potential contribution to the overall exposure by the cutaneous route including mucous membrane and eye, either by airborne or, more particularly, by direct contact with the substance. Vehicles can alter skin absorption.

3M

MSDS: MW HEAT SHRINK TUBING - COLORS FEBRUARY 2, 2001

PAGE: 4 of 4

7. PRECAUTIONARY INFORMATION

(CONTINUED)

SOURCE OF EXPOSURE LIMIT DATA:

- NONE: None Established

8. HEALTH HAZARD DATA

EYE CONTACT:

Vapors from heated material may cause eye irritation.

SKIN CONTACT:

Skin Burns (thermal, from contact with hot material): signs/symptoms can include burning pain, red and swollen skin, and blisters.

INHALATION:

Vapors of heated material may cause respiratory system irritation.

RESPIRATORY IRRITATION WOULD NOT BE EXPECTED IN APPLICATIONS WHERE ADEQUATE VENTILATION AND PROPER APPLICATION (AT DESIGNATED TEMPERATURES) IS UTILIZED. EXCESSIVE HEATING AND INADEQUATE VENTILATION MAY RESULT IN EXPOSURE TO THERMAL DEGRADATION AND DECOMPOSITION PRODUCTS AS INDICATED IN SECTION 4 OF THIS MSDS UNDER "REACTIVITY DATA-HAZARDOUS DECOMPOSITION PRODUCTS".

IF SWALLOWED:

Ingestion is not a likely route of exposure to this product.

SECTION CHANGE DATES

PHYSICAL DATA

SECTION CHANGED SINCE DECEMBER 3, 1997 ISSUE

Abbreviations: N/D - Not Determined N/A - Not Applicable CA - Approximately

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DIVISION: ELECTRICAL PRODUCTS DIVISION TRADE NAME:

TMW HEAT SHRINK TUBING - COLORS

ISSUED: FEBRUARY 2, 2001 SUPERSEDES: OCTOBER DOCUMENT: 07-0705-9

1. INGREDIENT	C.A.S. NO.	PERCENT	
HESIVE-LINED POLYOLEFIN TUBING	Unknown	100	
2. PHYSICAL DATA			
BOILING POINT:			
VAPOR PRESSURE:			
VAPOR DENSITY:			
SOLUBILITY IN WATER:			
SP. GRAVITY:	. 1.0 Water = 1		
PERCENT VOLATILE:			
pH:			
VISCOSITY:	. N/A		
MELTING POINT	. N/D		
APPEARANCE AND ODOR: Tubin	g, various sizes and	colors	

FLASH POINT: .. FLAMMABLE LIMITS - LEL: N/A FLAMMABLE LIMITS - UEL: N/A AUTOIGNITION TEMPERATURE: ...
EXTINGUISHING MEDIA: Carbon dioxide, Dry chemical, Foam SPECIAL FIRE FIGHTING PROCEDURES: Wear full protective clothing, including helmet, self-contained, positive pressure or pressure demand breathing apparatus, bunker coat and pants, bands around arms, waist and legs, face mask, and protective covering for exposed areas of the head. UNUSUAL FIRE AND EXPLOSION HAZARDS: None known. NFPA HAZARD CODES: HEALTH: 0 FIRE: 0 REACTIVITY: 0 UNUSUAL REACTION HAZARD: none

Abbreviations: N/D - Not Determined N/A - Not Applicable CA - Approximately

OSHA FIRE HAZARD CLASS: Not applicable



MSDS: TMW HEAT SHRINK TUBING - COLORS

FEBRUARY 2, 2001

PAGE: 2 of 4

4. REACTIVITY DATA

STABILITY: Stable
INCOMPATIBILITY - MATERIALS TO AVOID:
None known.
HAZARDOUS POLYMERIZATION: Will Not Occur
HAZARDOUS DECOMPOSITION PRODUCTS:
Carbon Monoxide and Carbon Dioxide, Oxides of Sulfur, Aldehydes,
Toxic Vapors, Gases or Particulates
Heating product beyond temperature recommended by instruction sheet
may cause release of the following compounds: Benzene, Toluene,
Formaldehyde, Acetaldehyde, Acetic Acid, and Vinyl Acetate.

5. ENVIRONMENTAL INFORMATION

SPILL RESPONSE:

Not applicable.

RECOMMENDED DISPOSAL:

Dispose of waste product in a sanitary landfill.

ENVIRONMENTAL DATA:

No data available.

REGULATORY INFORMATION:

Volatile Organic Compounds: N/A. VOC Less H2O & Exempt Solvents: N/A.

Since regulations vary, consult applicable regulations or authorities before disposal.

EPCRA HAZARD CLASS:

FIRE HAZARD: No PRESSURE: No REACTIVITY: No ACUTE: No CHRONIC: No

6. SUGGESTED FIRST AID

EYE CONTACT:

Immediately flush eyes with large amounts of water. Get immediate medical attention.

SKIN CONTACT:

If skin contact with hot material occurs: DO NOT ATTEMPT TO REMOVE MOLTEN MATERIAL. Immediately flush affected area with plenty of cold water and cover with a clean dressing. Have burn treated by a physician.

INHALATION:

If signs/symptoms occur, remove person to fresh air. If signs/symptoms continue, call a physician.

IF SWALLOWED:

Drink two glasses of water. Call a physician.



MSDS: TMW HEAT SHRINK TUBING - COLORS FEBRUARY 2, 2001

PAGE: 3 of 4

7. PRECAUTIONARY INFORMATION

EYE PROTECTION:

AVOID EYE CONTACT WITH VAPORS OR SMOKE RESULTING FROM OVERHEATING OR WHEN USED IN CONFINED AREAS.

SKIN PROTECTION:

Avoid skin contact with hot material. Wear appropriate gloves, such as Nomex, when handling this material to prevent thermal burns.

VENTILATION PROTECTION:

Local exhaust is required for operations using large amounts of material. Conduct air monitoring to determine adequacy of ventilation. Use in a well-ventilated area. Provide sufficient ventilation to maintain emissions below recommended exposure limits. If exhaust ventilation is not adequate, use appropriate respiratory protection.

WHEN USING THIS PRODUCT IN A CONFINED SPACE OR WHERE VENTILATION MAY BE INADEQUATE THEN RESPIRATORY PROTECTION MAY BE WORN. INADEQUATE VENTILATION OR CONFINED SPACES WOULD CAUSE VAPORS FROM HEATING OF THIS PRODUCT TO BE PRESENT IN THE USER'S BREATHING ZONE AND MAY CAUSE RESPIRATORY IRRITATION. EXCESSIVE HEATING OF THIS PRODUCT BEYOND THE RECOMMENDED APPLICATION TEMPERATURE OF 275 DEGREES FAHRENHEIT IS NOT RECOMMENDED AND MAY RESULT IN THERMAL DEGRADATION AND DECOMPOSITION PRODUCTS WHICH MAY RESULT IN ADVERSE HEALTH EFFECTS.

RESPIRATORY PROTECTION:

Avoid breathing of fumes. Select one of the following NIOSH approved respirators based on airborne concentration of contaminants and in accordance with OSHA regulations: Half-mask organic vapor respirator with dust/mist prefilter.

PREVENTION OF ACCIDENTAL INGESTION:

Wash hands after handling and before eating.

RECOMMENDED STORAGE:

Store at room temperature. Keep out of the reach of children.

FIRE AND EXPLOSION AVOIDANCE:

Not applicable.

EXPOSURE LIMITS

INGREDIENTS VALUE UNIT TYPE AUTH SKIN*
ADHESIVE-LINED POLYOLEFIN TUBING NONE NONE NONE NONE

* SKIN NOTATION: Listed substances indicated with "Y" under SKIN refer to the potential contribution to the overall exposure by the cutaneous route including mucous membrane and eye, either by airborne or, more particularly, by direct contact with the substance. Vehicles can alter skin absorption.



MSDS: THW HEAT SHRINK TUBING - COLORS

FEBRUARY 2, 2001

PAGE: 4 of 4

7. PRECAUTIONARY INFORMATION (CONTINUED)

SOURCE OF EXPOSURE LIMIT DATA:

- NONE: None Established

8. HEALTH HAZARD DATA

EYE CONTACT:

Vapors from heated material may cause eye irritation.

SKIN CONTACT:

Skin Burns (thermal, from contact with hot material): signs/symptoms can include burning pain, red and swollen skin, and blisters.

INHALATION:

Vapors of heated material may cause respiratory system irritation.

RESPIRATORY IRRITATION WOULD NOT BE EXPECTED IN APPLICATIONS WHERE ADEQUATE VENTILATION AND PROPER APPLICATION (AT DESIGNATED TEMPERATURES) IS UTILIZED. EXCESSIVE HEATING AND INADEQUATE VENTILATION MAY RESULT IN EXPOSURE TO THERMAL DEGRADATION AND DECOMPOSITION PRODUCTS AS INDICATED IN SECTION 4 OF THIS MSDS UNDER "REACTIVITY DATA-HAZARDOUS DECOMPOSITION PRODUCTS".

IF SWALLOWED:

Ingestion is not a likely route of exposure to this product.

SECTION CHANGE DATES

PHYSICAL DATA

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