

# Safety Data Sheet

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 08/17/22
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**Product identifier** 

3M<sup>TM</sup> Scotchcast<sup>TM</sup> Inline Splice Kit 72-N6 (Scotchcast<sup>TM</sup> 2104)

**ID** Number(s):

80-6100-7362-1

7000005912

Recommended use

Electrical, Electrical splicing and insulation

Supplier's details

**MANUFACTURER:** 3M

**DIVISION:** Electrical Markets Division

ADDRESS: 3M Center, St. Paul, MN 55144-1000, USA

**Telephone:** 1-888-3M HELPS (1-888-364-3577)

Emergency telephone number

1-800-364-3577 or (651) 737-6501 (24 hours)

This product is a kit or a multipart product which consists of multiple, independently packaged components. A Safety Data Sheet (SDS), Article Information Sheet (AIS), or Article Information Letter (AIL) for each of these components is included. Please do not separate the component documents from this cover page. The document numbers for components of this product are:

25-0742-4, 25-1043-6

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# **Safety Data Sheet**

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# **SECTION 1: Identification**

#### 1.1. Product identifier

3M<sup>TM</sup> Scotchcast<sup>TM</sup> Electrical Insulating Resin 2104, Part A

# **Product Identification Numbers**

80-6116-1275-7 7100213470

#### 1.2. Recommended use and restrictions on use

## Recommended use

Electrical, Part A of two part electrical resin

1.3. Supplier's details

MANUFACTURER: 3M

**DIVISION:** Electrical Markets Division

ADDRESS: 3M Center, St. Paul, MN 55144-1000, USA

**Telephone:** 1-888-3M HELPS (1-888-364-3577)

#### 1.4. Emergency telephone number

1-800-364-3577 or (651) 737-6501 (24 hours)

# **SECTION 2: Hazard identification**

# 2.1. Hazard classification

Serious Eye Damage/Irritation: Category 2A. Skin Corrosion/Irritation: Category 2. Respiratory Sensitizer: Category 1. Skin Sensitizer: Category 1A.

Specific Target Organ Toxicity (single exposure): Category 3. Specific Target Organ Toxicity (repeated exposure): Category 1.

#### 2.2. Label elements

#### Signal word

Danger

### **Symbols**

Exclamation mark | Health Hazard |

## **Pictograms**





#### **Hazard Statements**

Causes serious eye irritation.

Causes skin irritation.

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

May cause an allergic skin reaction.

May cause respiratory irritation.

Causes damage to organs through prolonged or repeated exposure:

respiratory system

#### **Precautionary Statements**

#### **Prevention:**

Do not breathe dust/fume/gas/mist/vapors/spray.

Use only outdoors or in a well-ventilated area.

In case of inadequate ventilation wear respiratory protection.

Wear protective gloves and eye/face protection.

Do not eat, drink or smoke when using this product.

Wash thoroughly after handling.

Contaminated work clothing must not be allowed out of the workplace.

#### **Response:**

IF INHALED: Remove person to fresh air and keep comfortable for breathing.

If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing.

If eye irritation persists: Get medical advice/attention.

IF ON SKIN: Wash with plenty of soap and water.

If skin irritation or rash occurs: Get medical advice/attention.

Take off contaminated clothing and wash it before reuse.

## Storage:

Store in a well-ventilated place. Keep container tightly closed.

Store locked up.

#### Disposal:

Dispose of contents/container in accordance with applicable local/regional/national/international regulations.

# **Supplemental Information:**

Persons previously sensitized to isocyanates may develop a cross-sensitization reaction to other isocyanates.

19% of the mixture consists of ingredients of unknown acute oral toxicity.

# **SECTION 3: Composition/information on ingredients**

Ingredient	C.A.S. No.	% by Wt
PHTHALIC ACID, DI-C11-14-BRANCHED ALKYL	68515-47-9	15 - 40 Trade Secret *
ESTERS, C13-RICH		

ISOCYANIC ACID, POLYMETHYLENEPOLYPHENYLENE ESTER, POLYMERS WITH HYDROXY-TERMINATED	68442-03-5	10 - 30 Trade Secret *
POLYBUTADIENE		
P,P'-Methylenebis(phenyl isocyanate)	101-68-8	10 - 30 Trade Secret *
POLYMETHYLENE POLYPHENYLENE	9016-87-9	10 - 30 Trade Secret *
ISOCYANATE		
1,1'-METHYLENEBIS(ISOCYANATOBENZENE)	26447-40-5	< 10 Trade Secret *
C.I. SOLVENT YELLOW 3	97-56-3	< 0.1 Trade Secret *

<sup>\*</sup>The specific chemical identity and/or exact percentage (concentration) of this composition has been withheld as a trade secret.

# **SECTION 4: First aid measures**

### 4.1. Description of first aid measures

#### Inhalation:

Remove person to fresh air. If you feel unwell, get medical attention.

#### Skin Contact:

Immediately wash with soap and water. Remove contaminated clothing and wash before reuse. If signs/symptoms develop, get medical attention.

#### **Eve Contact:**

Immediately flush with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. Get medical attention.

#### If Swallowed:

Rinse mouth. If you feel unwell, get medical attention.

# 4.2. Most important symptoms and effects, both acute and delayed

Irritating to the respiratory tract (coughing, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain). Allergic respiratory reaction (difficulty breathing, wheezing, cough, and tightness of chest). Allergic skin reaction (redness, swelling, blistering, and itching). Target organ effects following prolonged or repeated exposure. See Section 11 for additional details.

#### 4.3. Indication of any immediate medical attention and special treatment required

Not applicable

# **SECTION 5: Fire-fighting measures**

#### 5.1. Suitable extinguishing media

In case of fire: Use a fire fighting agent suitable for ordinary combustible material such as water or foam to extinguish.

#### 5.2. Special hazards arising from the substance or mixture

None inherent in this product.

#### **Hazardous Decomposition or By-Products**

<b>Substance</b>	<b>Condition</b>
Isocyanates	During Combustion
Carbon monoxide	During Combustion
Carbon dioxide	During Combustion
Hydrogen Cyanide	During Combustion
Oxides of Nitrogen	During Combustion

### 5.3. Special protective actions for fire-fighters

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.

# **SECTION 6: Accidental release measures**

# 6.1. Personal precautions, protective equipment and emergency procedures

Use personal protective equipment based on the results of an exposure assessment. Refer to Section 8 for PPE recommendations. If anticipated exposure resulting from an accidental release exceeds the protective capabilities of the PPE listed in Section 8, or are unknown, select PPE that offers an appropriate level of protection. Consider the physical and chemical hazards of the material when doing so. Examples of PPE ensembles for emergency response could include wearing bunker gear for a release of flammable material; wearing chemical protective clothing if the spilled material is a corrosive, a sensitizer, a significant dermal irritant, or can be absorbed through the skin; or donning a positive pressure supplied-air respirator for chemicals with inhalation hazards. For information regarding physical and health hazards, refer to sections 2 and 11 of the SDS. Evacuate area. Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapors, in accordance with good industrial hygiene practice.

#### 6.2. Environmental precautions

Avoid release to the environment.

# 6.3. Methods and material for containment and cleaning up

Contain spill. Pour isocyanate decontaminant solution (90% water, 8% concentrated ammonia, 2% detergent) on spill and allow to react for 10 minutes. Or pour water on spill and allow to react for more than 30 minutes. Cover with absorbent material. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Remember, adding an absorbent material does not remove a physical, health, or environmental hazard. Collect as much of the spilled material as possible. Place in a container approved for transportation by appropriate authorities, but do not seal the container for 48 hours to avoid pressure build-up. Clean up residue with an appropriate solvent selected by a qualified and authorized person. Ventilate the area with fresh air. Read and follow safety precautions on the solvent label and SDS. Dispose of collected material as soon as possible in accordance with applicable local/regional/national/international regulations.

# **SECTION 7: Handling and storage**

#### 7.1. Precautions for safe handling

For industrial/occupational use only. Not for consumer sale or use. Do not use in a confined area with minimal air exchange. Do not breathe dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Avoid release to the environment. Wash contaminated clothing before reuse.

#### 7.2. Conditions for safe storage including any incompatibilities

Store in a well-ventilated place. Keep container tightly closed to prevent contamination with water or air. If contamination is suspected, do not reseal container. Store away from amines.

# **SECTION 8: Exposure controls/personal protection**

#### 8.1. Control parameters

## Occupational exposure limits

If a component is disclosed in section 3 but does not appear in the table below, an occupational exposure limit is not available for the component.

Ingredient	C.A.S. No.	Agency	Limit type	<b>Additional Comments</b>
P,P'-Methylenebis(phenyl	101-68-8	ACGIH	TWA:0.005 ppm	
isocyanate)				
P,P'-Methylenebis(phenyl	101-68-8	OSHA	CEIL:0.2 mg/m3(0.02 ppm)	
isocyanate)				

ACGIH: American Conference of Governmental Industrial Hygienists

\_\_\_\_

AIHA: American Industrial Hygiene Association

CMRG: Chemical Manufacturer's Recommended Guidelines

OSHA: United States Department of Labor - Occupational Safety and Health Administration

TWA: Time-Weighted-Average STEL: Short Term Exposure Limit

CEIL: Ceiling

### 8.2. Exposure controls

#### 8.2.1. Engineering controls

Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below relevant Exposure Limits and/or control dust/fume/gas/mist/vapors/spray. If ventilation is not adequate, use respiratory protection equipment.

# 8.2.2. Personal protective equipment (PPE)

## Eye/face protection

Select and use eye/face protection to prevent contact based on the results of an exposure assessment. The following eye/face protection(s) are recommended:

Safety Glasses with side shields

**Indirect Vented Goggles** 

# Skin/hand protection

Select and use gloves and/or protective clothing approved to relevant local standards to prevent skin contact based on the results of an exposure assessment. Selection should be based on use factors such as exposure levels, concentration of the substance or mixture, frequency and duration, physical challenges such as temperature extremes, and other use conditions. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible gloves/protective clothing.

Gloves made from the following material(s) are recommended: Neoprene

Nitrile Rubber

Natural Rubber

If this product is used in a manner that presents a higher potential for exposure (eg. spraying, high splash potential etc.), then use of protective coveralls may be necessary. Select and use body protection to prevent contact based on the results of an exposure assessment. The following protective clothing material(s) are recommended: Apron - Neoprene Apron - Nitrile

Apron - polymer laminate

#### **Respiratory protection**

An exposure assessment may be needed to decide if a respirator is required. If a respirator is needed, use respirators as part of a full respiratory protection program. Based on the results of the exposure assessment, select from the following respirator type(s) to reduce inhalation exposure:

Half facepiece or full facepiece air-purifying respirator suitable for organic vapors and particulates Half facepiece or full facepiece supplied-air respirator

For questions about suitability for a specific application, consult with your respirator manufacturer.

# **SECTION 9: Physical and chemical properties**

## 9.1. Information on basic physical and chemical properties

Appearance

Physical stateLiquidColorDark Green

**Specific Physical Form:** Resin

01/31/25

OdorModerate IsocyanateOdor thresholdNo Data AvailablepHNo Data AvailableMelting pointNo Data Available

**Boiling Point** >= 230 °F

Flash Point 230 °F [Test Method:Closed Cup]

Evaporation rateNo Data AvailableFlammability (solid, gas)Not ApplicableFlammable Limits(LEL)No Data AvailableFlammable Limits(UEL)No Data AvailableVapor PressureNo Data AvailableVapor DensityNo Data Available

**Density** 1.04 g/ml

Specific Gravity1.04 [Ref Std:WATER=1]Solubility in WaterSlight (less than 10%)Solubility- non-waterNo Data AvailablePartition coefficient: n-octanol/ waterNo Data AvailableAutoignition temperatureNo Data AvailableDecomposition temperatureNo Data Available

Viscosity 1,400 centipoise - 2,000 centipoise

Average particle sizeNo Data AvailableBulk densityNo Data AvailableHazardous Air PollutantsNo Data AvailableMolecular weightNo Data AvailableVolatile Organic CompoundsNo Data Available

Percent volatile Negligible

Softening pointNo Data AvailableVOC Less H2O & Exempt SolventsNo Data Available

# **SECTION 10: Stability and reactivity**

#### 10.1. Reactivity

This material may be reactive with certain agents under certain conditions - see the remaining headings in this section.

#### 10.2. Chemical stability

Stable.

# 10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

# 10.4. Conditions to avoid

Not determined

# 10.5. Incompatible materials

Amines Alcohols

Water

Not Applicable

# 10.6. Hazardous decomposition products

<u>Substance</u> <u>Condition</u>

None known.

Refer to section 5.2 for hazardous decomposition products during combustion.

# **SECTION 11: Toxicological information**

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. In addition, toxicological data on ingredients may not be reflected in the material classification and/or the signs and symptoms of exposure, because an ingredient may be present below the threshold for labeling, an ingredient may not be available for exposure, or the data may not be relevant to the material as a whole.

#### 11.1. Information on Toxicological effects

#### Signs and Symptoms of Exposure

Based on test data and/or information on the components, this material may produce the following health effects:

#### **Inhalation:**

Respiratory Tract Irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

Allergic Respiratory Reaction: Signs/symptoms may include difficulty breathing, wheezing, cough, and tightness of chest.

May cause additional health effects (see below).

#### **Skin Contact:**

Skin Irritation: Signs/symptoms may include localized redness, swelling, itching, dryness, cracking, blistering, and pain. Allergic Skin Reaction (non-photo induced): Signs/symptoms may include redness, swelling, blistering, and itching.

#### **Eve Contact:**

Severe Eye Irritation: Signs/symptoms may include significant redness, swelling, pain, tearing, cloudy appearance of the cornea, and impaired vision.

#### **Ingestion:**

Gastrointestinal Irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea.

#### **Additional Health Effects:**

# Prolonged or repeated exposure may cause target organ effects:

Respiratory Effects: Signs/symptoms may include cough, shortness of breath, chest tightness, wheezing, increased heart rate, bluish colored skin (cyanosis), sputum production, changes in lung function tests, and/or respiratory failure.

## Carcinogenicity:

<u>Ingredient</u>	CAS No.	Class Description	Regulation
o-Aminoazotoluene	97-56-3	Anticipated human carcinogen	National Toxicology Program Carcinogens
ortho-Aminoazotoluene	97-56-3	Grp. 2B: Possible human carc.	International Agency for Research on Cancer

# **Additional Information:**

Persons previously sensitized to isocyanates may develop a cross-sensitization reaction to other isocyanates.

#### **Toxicological Data**

If a component is disclosed in section 3 but does not appear in a table below, either no data are available for that endpoint or the data are not sufficient for classification.

#### Acute Toxicity

Overall product Inhalation- No data available; calculated ATE >50 mg/l	Name	Route	Species	Value
	Overall product			

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	Vapor(4 hr)		
Overall product	Ingestion		No data available; calculated ATE >5,000 mg/kg
POLYMETHYLENE POLYPHENYLENE ISOCYANATE	Dermal	Rabbit	LD50 > 5,000 mg/kg
POLYMETHYLENE POLYPHENYLENE ISOCYANATE	Inhalation-	Rat	LC50 0.368 mg/l
	Dust/Mist		
	(4 hours)		
POLYMETHYLENE POLYPHENYLENE ISOCYANATE	Ingestion	Rat	LD50 31,600 mg/kg
P,P'-Methylenebis(phenyl isocyanate)	Dermal	Rabbit	LD50 > 5,000 mg/kg
P,P'-Methylenebis(phenyl isocyanate)	Inhalation-	Rat	LC50 0.368 mg/l
	Dust/Mist		
	(4 hours)		
P,P'-Methylenebis(phenyl isocyanate)	Ingestion	Rat	LD50 31,600 mg/kg
1,1'-METHYLENEBIS(ISOCYANATOBENZENE)	Dermal	Rabbit	LD50 > 5,000 mg/kg
1,1'-METHYLENEBIS(ISOCYANATOBENZENE)	Inhalation-	Rat	LC50 0.368 mg/l
	Dust/Mist		
	(4 hours)		
1,1'-METHYLENEBIS(ISOCYANATOBENZENE)	Ingestion	Rat	LD50 31,600 mg/kg
C.I. SOLVENT YELLOW 3	Ingestion	Rat	LD50 1,500 mg/kg

ATE = acute toxicity estimate

#### Skin Corrosion/Irritation

Name	Species	Value
POLYMETHYLENE POLYPHENYLENE ISOCYANATE	official classifica	Irritant
P,P'-Methylenebis(phenyl isocyanate)	official classifica	Irritant
1,1'-METHYLENEBIS(ISOCYANATOBENZENE)	official classifica tion	Irritant

**Serious Eye Damage/Irritation** 

Name	Species	Value
POLYMETHYLENE POLYPHENYLENE ISOCYANATE	official	Severe irritant
	classifica	
	tion	
P,P'-Methylenebis(phenyl isocyanate)	official	Severe irritant
	classifica	
	tion	
1,1'-METHYLENEBIS(ISOCYANATOBENZENE)	official	Severe irritant
	classifica	
	tion	

# **Skin Sensitization**

Name	Species	Value
POLYMETHYLENE POLYPHENYLENE ISOCYANATE	Mouse	Sensitizing
P,P'-Methylenebis(phenyl isocyanate)	Mouse	Sensitizing
1,1'-METHYLENEBIS(ISOCYANATOBENZENE)	Mouse	Sensitizing
C.I. SOLVENT YELLOW 3	Human	Sensitizing

**Respiratory Sensitization** 

Name	Species	Value
POLYMETHYLENE POLYPHENYLENE ISOCYANATE	Human	Sensitizing
P,P'-Methylenebis(phenyl isocyanate)	Human	Sensitizing
1,1'-METHYLENEBIS(ISOCYANATOBENZENE)	Human	Sensitizing

**Germ Cell Mutagenicity** 

Name	Route	Value

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POLYMETHYLENE POLYPHENYLENE ISOCYANATE	In Vitro	Some positive data exist, but the data are not sufficient for classification
P,P'-Methylenebis(phenyl isocyanate)	In Vitro	Some positive data exist, but the data are not sufficient for classification
1,1'-METHYLENEBIS(ISOCYANATOBENZENE)	In Vitro	Some positive data exist, but the data are not sufficient for classification
C.I. SOLVENT YELLOW 3	In Vitro	Some positive data exist, but the data are not sufficient for classification
C.I. SOLVENT YELLOW 3	In vivo	Mutagenic

Carcinogenicity

Name	Route	Species	Value
POLYMETHYLENE POLYPHENYLENE ISOCYANATE	Inhalation	Rat	Some positive data exist, but the data are not sufficient for classification
P,P'-Methylenebis(phenyl isocyanate)	Inhalation	Rat	Some positive data exist, but the data are not sufficient for classification
1,1'-METHYLENEBIS(ISOCYANATOBENZENE)	Inhalation	Rat	Some positive data exist, but the data are not sufficient for classification
C.I. SOLVENT YELLOW 3	Dermal	Mouse	Carcinogenic
C.I. SOLVENT YELLOW 3	Ingestion	Multiple	Carcinogenic
		animal	
		species	

# Reproductive Toxicity

Reproductive and/or Developmental Effects

Reproductive and/or Developmental Effects					
Name	Route	Value	Species	Test Result	Exposure
					Duration
POLYMETHYLENE POLYPHENYLENE	Inhalation	Not classified for development	Rat	NOAEL 0.004	during
ISOCYANATE		•		mg/l	organogenesi
					s
P,P'-Methylenebis(phenyl isocyanate)	Inhalation	Not classified for development	Rat	NOAEL 0.004	during
		•		mg/l	organogenesi
					S
1,1'-	Inhalation	Not classified for development	Rat	NOAEL 0.004	during
METHYLENEBIS(ISOCYANATOBENZE		•		mg/l	organogenesi
NE)					s

# Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
POLYMETHYLENE POLYPHENYLENE ISOCYANATE	Inhalation	respiratory irritation	May cause respiratory irritation	official classifica tion	NOAEL Not available	
P,P'-Methylenebis(phenyl isocyanate)	Inhalation	respiratory irritation	May cause respiratory irritation	official classifica tion	NOAEL Not available	
1,1'- METHYLENEBIS(ISOCY ANATOBENZENE)	Inhalation	respiratory irritation	May cause respiratory irritation	official classifica tion	NOAEL Not available	

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
POLYMETHYLENE POLYPHENYLENE ISOCYANATE	Inhalation	respiratory system	Causes damage to organs through prolonged or repeated exposure	Rat	LOAEL 0.004 mg/l	13 weeks
P,P'-Methylenebis(phenyl isocyanate)	Inhalation	respiratory system	Causes damage to organs through prolonged or repeated exposure	Rat	LOAEL 0.004 mg/l	13 weeks
1,1'-	Inhalation	respiratory system	Causes damage to organs through	Rat	LOAEL	13 weeks

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METHYLENEBIS(ISOCY		prolonged or repeated exposure	0.004 mg/l	
ANATOBENZENE)				

#### **Aspiration Hazard**

For the component/components, either no data are currently available or the data are not sufficient for classification.

Please contact the address or phone number listed on the first page of the SDS for additional toxicological information on this material and/or its components.

# **SECTION 12: Ecological information**

## **Ecotoxicological information**

Please contact the address or phone number listed on the first page of the SDS for additional ecotoxicological information on this material and/or its components.

## **Chemical fate information**

Please contact the address or phone number listed on the first page of the SDS for additional chemical fate information on this material and/or its components.

# **SECTION 13: Disposal considerations**

## 13.1. Disposal methods

Dispose of contents/ container in accordance with the local/regional/national/international regulations.

Dispose of waste product in a permitted industrial waste facility. As a disposal alternative, incinerate in a permitted waste incineration facility. Proper destruction may require the use of additional fuel during incineration processes. Empty drums/barrels/containers used for transporting and handling hazardous chemicals (chemical substances/mixtures/preparations classified as Hazardous as per applicable regulations) shall be considered, stored, treated & disposed of as hazardous wastes unless otherwise defined by applicable waste regulations. Consult with the respective regulating authorities to determine the available treatment and disposal facilities.

EPA Hazardous Waste Number (RCRA): Not regulated

# **SECTION 14: Transport Information**

For Transport Information, please visit http://3M.com/Transportinfo or call 1-800-364-3577 or 651-737-6501.

# **SECTION 15: Regulatory information**

# 15.1. US Federal Regulations

Contact 3M for more information.

## **EPCRA 311/312 Hazard Classifications:**

Physical Hazards	
Not applicable	

Health Hazards	
Respiratory or Skin Sensitization	
Serious eye damage or eye irritation	
Skin Corrosion or Irritation	
Specific target organ toxicity (single or repeated exposure)	

#### Section 313 Toxic Chemicals subject to the reporting requirements of that section and 40 CFR part 372 (EPCRA):

Ingredient	C.A.S. No	<u>% by Wt</u>		
POLYMETHYLENE POLYPHENYLENE	9016-87-9	Trade Secret	10 -	30
ISOCYANATE				
POLYMETHYLENE POLYPHENYLENE	9016-87-9	Trade Secret	10 -	30
ISOCYANATE (DIISOCYANATES (CERTAIN				
CHEMICALS ONLY))				
P,P'-Methylenebis(phenyl isocyanate)	101-68-8	Trade Secret	10 -	30
P,P'-Methylenebis(phenyl isocyanate) (Benzene, 1,1'-	101-68-8	Trade Secret	10 -	30
methylenebis[4-isocyanato-)				
P,P'-Methylenebis(phenyl isocyanate)	101-68-8	Trade Secret	10 -	30
(DIISOCYANATES (CERTAIN CHEMICALS				
ONLY))				

# 15.2. State Regulations

Contact 3M for more information.

#### 15.3. Chemical Inventories

The components of this product are in compliance with the chemical notification requirements of TSCA. All required components of this product are listed on the active portion of the TSCA Inventory.

Contact 3M for more information.

## 15.4. International Regulations

Contact 3M for more information.

This SDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.

# **SECTION 16: Other information**

### NFPA Hazard Classification

Health: 2 Flammability: 1 Instability: 0 Special Hazards: None

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

# **HMIS Hazard Classification**

**Health:** \*3 Flammability: 1 Physical Hazard: 0 Personal Protection: X - See PPE section.

Hazardous Material Identification System (HMIS® IV) hazard ratings are designed to inform employees of chemical hazards in the workplace. These ratings are based on the inherent properties of the material under expected conditions of normal use and are not intended for use in emergency situations. HMIS® IV ratings are to be used with a fully implemented HMIS® IV program. HMIS® is a registered mark of the American Coatings Association (ACA).

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# Safety Data Sheet

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# **SECTION 1: Identification**

#### 1.1. Product identifier

3M<sup>TM</sup> Scotchcast<sup>TM</sup> Electrical Insulating Resin 2104, Part B

# **Product Identification Numbers**

ID Number UPC ID Number UPC

80-6116-1276-5

7100213469

#### 1.2. Recommended use and restrictions on use

### Recommended use

Electrical, Part B of two part electrical resin

#### 1.3. Supplier's details

MANUFACTURER: 3M

**DIVISION:** Electrical Markets Division

ADDRESS: 3M Center, St. Paul, MN 55144-1000, USA

**Telephone:** 1-888-3M HELPS (1-888-364-3577)

#### 1.4. Emergency telephone number

1-800-364-3577 or (651) 737-6501 (24 hours)

# **SECTION 2: Hazard identification**

### 2.1. Hazard classification

Serious Eye Damage/Irritation: Category 1.

#### 2.2. Label elements

# Signal word

Danger

# **Symbols**

Corrosion |

#### **Pictograms**



#### **Hazard Statements**

Causes serious eye damage.

# **Precautionary Statements**

#### **Prevention:**

Wear eye/face protection.

## **Response:**

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Immediately call a POISON CENTER or doctor/physician.

# **SECTION 3: Composition/information on ingredients**

Ingredient	C.A.S. No.	% by Wt
POLYPROPYLENE GLYCOL GLYCEROL	25791-96-2	45 - 70 Trade Secret *
TRIETHER		
N,N-DI(2-HYDROXYPROPYL)ANILINE	3077-13-2	10 - 30 Trade Secret *
PHTHALIC ACID, DI-C11-14-BRANCHED ALKYL	68515-47-9	10 - 30 Trade Secret *
ESTERS, C13-RICH		
DIPROPYLENE GLYCOL	25265-71-8	5 - 10 Trade Secret *

<sup>\*</sup>The specific chemical identity and/or exact percentage (concentration) of this composition has been withheld as a trade secret.

# **SECTION 4: First aid measures**

# 4.1. Description of first aid measures

#### Inhalation:

Remove person to fresh air. If you feel unwell, get medical attention.

#### **Skin Contact:**

Wash with soap and water. If signs/symptoms develop, get medical attention.

#### **Eve Contact:**

Immediately flush with large amounts of water for at least 15 minutes. Remove contact lenses if easy to do. Continue rinsing. Immediately get medical attention.

# If Swallowed:

Rinse mouth. If you feel unwell, get medical attention.

## 4.2. Most important symptoms and effects, both acute and delayed

Serious damage to the eyes (corneal cloudiness, severe pain, tearing, ulcerations, and significantly impaired or loss of vision).

# **4.3.** Indication of any immediate medical attention and special treatment required Not applicable.

# **SECTION 5: Fire-fighting measures**

## 5.1. Suitable extinguishing media

In case of fire: Use a fire fighting agent suitable for ordinary combustible material such as water or foam to extinguish.

#### 5.2. Special hazards arising from the substance or mixture

None inherent in this product.

# **Hazardous Decomposition or By-Products**

SubstanceConditionAldehydesDuring CombustionCarbon monoxideDuring CombustionCarbon dioxideDuring CombustionOxides of NitrogenDuring Combustion

## 5.3. Special protective actions for fire-fighters

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.

# **SECTION 6: Accidental release measures**

# 6.1. Personal precautions, protective equipment and emergency procedures

Use personal protective equipment based on the results of an exposure assessment. Refer to Section 8 for PPE recommendations. If anticipated exposure resulting from an accidental release exceeds the protective capabilities of the PPE listed in Section 8, or are unknown, select PPE that offers an appropriate level of protection. Consider the physical and chemical hazards of the material when doing so. Examples of PPE ensembles for emergency response could include wearing bunker gear for a release of flammable material; wearing chemical protective clothing if the spilled material is a corrosive, a sensitizer, a significant dermal irritant, or can be absorbed through the skin; or donning a positive pressure supplied-air respirator for chemicals with inhalation hazards. For information regarding physical and health hazards, refer to sections 2 and 11 of the SDS. Evacuate area. Ventilate the area with fresh air. For large spill, or spills in confined spaces, provide mechanical ventilation to disperse or exhaust vapors, in accordance with good industrial hygiene practice.

### 6.2. Environmental precautions

Avoid release to the environment.

# 6.3. Methods and material for containment and cleaning up

Contain spill. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Remember, adding an absorbent material does not remove a physical, health, or environmental hazard. Collect as much of the spilled material as possible. Place in a closed container approved for transportation by appropriate authorities. Clean up residue with an appropriate solvent selected by a qualified and authorized person. Ventilate the area with fresh air. Read and follow safety precautions on the solvent label and SDS. Seal the container. Dispose of collected material as soon as possible in accordance with applicable local/regional/national/international regulations.

# **SECTION 7: Handling and storage**

# 7.1. Precautions for safe handling

For industrial/occupational use only. Not for consumer sale or use. Avoid breathing dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Avoid release to the environment.

#### 7.2. Conditions for safe storage including any incompatibilities

No special storage requirements.

# **SECTION 8: Exposure controls/personal protection**

## 8.1. Control parameters

## Occupational exposure limits

No occupational exposure limit values exist for any of the components listed in Section 3 of this SDS.

#### 8.2. Exposure controls

#### 8.2.1. Engineering controls

Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below relevant Exposure Limits and/or control dust/fume/gas/mist/vapors/spray. If ventilation is not adequate, use respiratory protection equipment.

## 8.2.2. Personal protective equipment (PPE)

## Eye/face protection

Select and use eye/face protection to prevent contact based on the results of an exposure assessment. The following eye/face protection(s) are recommended:

Full Face Shield

**Indirect Vented Goggles** 

# Skin/hand protection

No chemical protective gloves are required.

# **Respiratory protection**

An exposure assessment may be needed to decide if a respirator is required. If a respirator is needed, use respirators as part of a full respiratory protection program. Based on the results of the exposure assessment, select from the following respirator type(s) to reduce inhalation exposure:

Half facepiece or full facepiece air-purifying respirator suitable for organic vapors and particulates Half facepiece or full facepiece supplied-air respirator

For questions about suitability for a specific application, consult with your respirator manufacturer.

# **SECTION 9: Physical and chemical properties**

## 9.1. Information on basic physical and chemical properties

Appearance

Physical stateLiquidColorLight Amber

Odor Mild Glycol

Odor thresholdNo Data AvailablepHNo Data AvailableMelting pointNo Data AvailableBoiling Point>= 230 °F

**Boiling Point** >= 230 °F **Flash Point** >= 230 °F [*Test Method*:Closed Cup]

Evaporation rate

No Data Available
Flammability (solid, gas)

Flammable Limits(LEL)

Flammable Limits(UEL)

No Data Available
No Data Available

Vapor Pressure Negligible

Vapor Density No Data Available

**Density** 1 g/ml

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01/31/25

Specific Gravity1 [Ref Std: WATER=1]Solubility in WaterSlight (less than 10%)Solubility- non-waterNo Data AvailablePartition coefficient: n-octanol/ waterNo Data AvailableAutoignition temperatureNo Data AvailableDecomposition temperatureNo Data Available

Viscosity 450 centipoise - 750 centipoise

Average particle size No Data Available **Bulk density** No Data Available **Hazardous Air Pollutants** No Data Available Molecular weight No Data Available **Volatile Organic Compounds** No Data Available Percent volatile No Data Available **Softening point** No Data Available **VOC Less H2O & Exempt Solvents** No Data Available

# **SECTION 10: Stability and reactivity**

#### 10.1. Reactivity

This material is considered to be non reactive under normal use conditions.

#### 10.2. Chemical stability

Stable.

#### 10.3. Possibility of hazardous reactions

Hazardous polymerization will not occur.

## 10.4. Conditions to avoid

None known.

#### 10.5. Incompatible materials

None known.

No Data Available

#### 10.6. Hazardous decomposition products

**Substance Condition** 

None known.

Refer to section 5.2 for hazardous decomposition products during combustion.

# **SECTION 11: Toxicological information**

The information below may not be consistent with the material classification in Section 2 if specific ingredient classifications are mandated by a competent authority. In addition, toxicological data on ingredients may not be reflected in the material classification and/or the signs and symptoms of exposure, because an ingredient may be present below the threshold for labeling, an ingredient may not be available for exposure, or the data may not be relevant to the material as a whole.

## 11.1. Information on Toxicological effects

Signs and Symptoms of Exposure

Based on test data and/or information on the components, this material may produce the following health effects:

#### Inhalation:

Respiratory Tract Irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

# **Skin Contact:**

Contact with the skin during product use is not expected to result in significant irritation.

#### **Eye Contact:**

Corrosive (Eye Burns): Signs/symptoms may include cloudy appearance of the cornea, chemical burns, severe pain, tearing, ulcerations, significantly impaired vision or complete loss of vision.

#### Ingestion:

Gastrointestinal Irritation: Signs/symptoms may include abdominal pain, stomach upset, nausea, vomiting and diarrhea.

# **Toxicological Data**

If a component is disclosed in section 3 but does not appear in a table below, either no data are available for that endpoint or the data are not sufficient for classification.

**Acute Toxicity** 

Name	Route	Species	Value
Overall product	Dermal		No data available; calculated ATE >5,000 mg/kg
Overall product	Ingestion		No data available; calculated ATE >5,000 mg/kg
POLYPROPYLENE GLYCOL GLYCEROL TRIETHER	Dermal	Rat	LD50 > 2,000 mg/kg
POLYPROPYLENE GLYCOL GLYCEROL TRIETHER	Inhalation-	Rat	LC50 > 50  mg/l
	Dust/Mist		
	(4 hours)		
POLYPROPYLENE GLYCOL GLYCEROL TRIETHER	Ingestion	Rat	LD50 4,600 mg/kg
N,N-DI(2-HYDROXYPROPYL)ANILINE	Dermal	Rabbit	LD50 > 2,000 mg/kg
N,N-DI(2-HYDROXYPROPYL)ANILINE	Ingestion	Rat	LD50 3,800 mg/kg
DIPROPYLENE GLYCOL	Dermal	Rabbit	LD50 > 5,010  mg/kg
DIPROPYLENE GLYCOL	Inhalation-	Rat	LC50 > 2.34 mg/l
	Dust/Mist		
	(4 hours)		
DIPROPYLENE GLYCOL	Ingestion	Rat	LD50 > 5,010 mg/kg

ATE = acute toxicity estimate

#### Skin Corrosion/Irritation

Name	Species	Value
POLYPROPYLENE GLYCOL GLYCEROL TRIETHER	Rabbit	No significant irritation
N,N-DI(2-HYDROXYPROPYL)ANILINE	Professio	Minimal irritation
	nal	
	judgeme	
	nt	
DIPROPYLENE GLYCOL	Rabbit	No significant irritation

Serious Eye Damage/Irritation

Serious Lye Bunnage in Hunton				
Name	Species	Value		
POLYPROPYLENE GLYCOL GLYCEROL TRIETHER	Rabbit	Mild irritant		
N,N-DI(2-HYDROXYPROPYL)ANILINE	Professio	Corrosive		
	nal			
	judgeme			
	nt			
DIPROPYLENE GLYCOL	Rabbit	No significant irritation		

# **Skin Sensitization**

Name	Species	Value
DIPROPYLENE GLYCOL	Guinea	Not classified
	pig	

# **Respiratory Sensitization**

For the component/components, either no data are currently available or the data are not sufficient for classification.

**Germ Cell Mutagenicity** 

Name	Route	Value
DIPROPYLENE GLYCOL	In Vitro	Not mutagenic
DIPROPYLENE GLYCOL	In vivo	Not mutagenic

Carcinogenicity

Name	Route	Species	Value	
DIPROPYLENE GLYCOL	Ingestion	Multiple	Not carcinogenic	
		animal		
		species		

# **Reproductive Toxicity**

Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test Result	Exposure Duration
DIPROPYLENE GLYCOL	Ingestion	Not classified for development	Rat	NOAEL 5,000 mg/kg/day	during organogenesi s

# Target Organ(s)

## **Specific Target Organ Toxicity - single exposure**

For the component/components, either no data are currently available or the data are not sufficient for classification.

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
DIPROPYLENE GLYCOL	Ingestion	respiratory system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 470 mg/kg/day	105 weeks
DIPROPYLENE GLYCOL	Ingestion	heart   endocrine system   liver	Not classified	Rat	NOAEL 3,040 mg/kg/day	105 weeks
DIPROPYLENE GLYCOL	Ingestion	kidney and/or bladder	Not classified	Rat	NOAEL 115 mg/kg/day	105 weeks
DIPROPYLENE GLYCOL	Ingestion	skin   gastrointestinal tract   bone, teeth, nails, and/or hair   hematopoietic system   immune system   nervous system   vascular system	Not classified	Rat	NOAEL 3,040 mg/kg/day	105 weeks

# **Aspiration Hazard**

For the component/components, either no data are currently available or the data are not sufficient for classification.

Please contact the address or phone number listed on the first page of the SDS for additional toxicological information on this material and/or its components.

# **SECTION 12: Ecological information**

# **Ecotoxicological information**

Please contact the address or phone number listed on the first page of the SDS for additional ecotoxicological information on this material and/or its components.

#### **Chemical fate information**

Please contact the address or phone number listed on the first page of the SDS for additional chemical fate information on this material and/or its components.

# **SECTION 13: Disposal considerations**

### 13.1. Disposal methods

Dispose of contents/ container in accordance with the local/regional/national/international regulations.

Dispose of completely cured (or polymerized) material in a permitted industrial waste facility. As a disposal alternative, incinerate uncured product in a permitted waste incineration facility. Proper destruction may require the use of additional fuel during incineration processes. If no other disposal options are available, waste product—that has been completely cured or polymerized may be placed in a landfill properly designed for industrial waste. Empty drums/barrels/containers used for transporting and handling hazardous chemicals (chemical substances/mixtures/preparations classified as Hazardous as per applicable regulations) shall be considered, stored, treated & disposed of as hazardous wastes unless otherwise defined by applicable waste regulations. Consult with the respective regulating authorities to determine the available treatment and disposal facilities.

EPA Hazardous Waste Number (RCRA): Not regulated

# **SECTION 14: Transport Information**

For Transport Information, please visit http://3M.com/Transportinfo or call 1-800-364-3577 or 651-737-6501.

# **SECTION 15: Regulatory information**

#### 15.1. US Federal Regulations

Contact 3M for more information.

# **EPCRA 311/312 Hazard Classifications:**

Physical Hazards

Not applicable

# **Health Hazards**

Serious eye damage or eye irritation

## 15.2. State Regulations

Contact 3M for more information.

### 15.3. Chemical Inventories

The components of this product are in compliance with the chemical notification requirements of TSCA. All required components of this product are listed on the active portion of the TSCA Inventory.

Contact 3M for more information.

# 15.4. International Regulations

Contact 3M for more information.

This SDS has been prepared to meet the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200.

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# **SECTION 16: Other information**

## NFPA Hazard Classification

Health: 3 Flammability: 1 Instability: 0 Special Hazards: None

National Fire Protection Association (NFPA) hazard ratings are designed for use by emergency response personnel to address the hazards that are presented by short-term, acute exposure to a material under conditions of fire, spill, or similar emergencies. Hazard ratings are primarily based on the inherent physical and toxic properties of the material but also include the toxic properties of combustion or decomposition products that are known to be generated in significant quantities.

#### **HMIS Hazard Classification**

**Health:** 3 Flammability: 1 Physical Hazard: 0 Personal Protection: X - See PPE section.

Hazardous Material Identification System (HMIS® IV) hazard ratings are designed to inform employees of chemical hazards in the workplace. These ratings are based on the inherent properties of the material under expected conditions of normal use and are not intended for use in emergency situations. HMIS® IV ratings are to be used with a fully implemented HMIS® IV program. HMIS® is a registered mark of the American Coatings Association (ACA).

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