

## Safety Data Sheet

### SECTION 1: Identification

#### 1.1. Product identifier

McKesson® Cast Tape, 2", 3", 4", 5"

#### Product Identification Numbers

115-2, 115-2A, 115-2B, 115-2G, 115-2R, 115-2U, 115-2X, 115-3, 115-3A, 115-3B, 115-3G, 115-3R, 115-3U, 115-3X, 115-4, 115-4A, 115-4B, 115-5

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

##### Recommended use

Immobilization of upper and lower extremities

**DISTRIBUTED BY:** McKesson Medical-Surgical Inc.  
9954 Mayland Drive, Suite 4000  
Richmond, VA 23233

**INFORMATION LINE:** 1-800-777-4908      Monday – Friday 8:00 a.m. – 6:00 p.m. EST

**EMERGENCY PHONE:** 1-800-451-8346 (3E Company) Day or Night

### SECTION 2: Hazard identification

The label elements below were prepared in accordance with OSHA Hazard Communication Standard, 29 CFR 1910.1200. This information may be different from the actual product label information for labels regulated by other agencies.

## 2.1. Hazard classification

Respiratory Sensitizer: Category 1.

Skin Sensitizer: Category 1.

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

## 2.2. Label elements

### Signal word

Danger

### Symbols

Health Hazard |

### Pictograms



### Hazard Statements

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

May cause an allergic skin reaction.

Causes damage to organs through prolonged or repeated exposure:  
respiratory system |

### Precautionary Statements

#### Prevention:

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

In case of inadequate ventilation wear respiratory protection.

Wear protective gloves.

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: If breathing is difficult, remove person to fresh air and keep comfortable for breathing.

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

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

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

Wash contaminated clothing before reuse.

Get medical advice/attention if you feel unwell.

#### Disposal:

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

## 2.3. Hazards not otherwise classified

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

## SECTION 3: Composition/information on ingredients

Ingredient	C.A.S. No.	% by Wt
Fibrous glass	65997-17-3	50 - 60 Trade Secret *
4,4'-DIPHENYLMETHANE DIISOCYANATE-POLYPROPYLENE GLYCOL POLYMER	9048-57-1	15 - 40 Trade Secret *
Diphenylmethane diisocyanate	26447-40-5	8 - 14 Trade Secret *
CALCIUM METASILICATE	13983-17-0	1 - 5 Trade Secret *
BHT - BUTYLATED HYDROXYTOLUENE	128-37-0	0.1 - 1 Trade Secret *

\*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.

**Eye Contact:**

Flush with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. If signs/symptoms persist, 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

See Section 11.1. Information on toxicological effects.

### 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

**Substance**

Carbon monoxide  
Carbon dioxide  
Hydrogen Cyanide  
Oxides of Nitrogen

**Condition**

During Combustion  
During Combustion  
During Combustion  
During Combustion

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

No special protective actions for fire-fighters are anticipated.

## SECTION 6: Accidental release measures

### 6.1. Personal precautions, protective equipment and emergency procedures

Ventilate the area with fresh air. Refer to other sections of this SDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment.

### 6.2. Environmental precautions

Avoid release to the environment.

### 6.3. Methods and material for containment and cleaning up

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. Dispose of collected material as soon as possible.

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

For industrial or professional use only. 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. Wash contaminated clothing before reuse. Avoid contact with oxidizing agents (eg. chlorine, chromic acid etc.)

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

Keep container tightly closed. Store away from strong bases. Store away from oxidizing agents.

## 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	Additional Comments
BHT - BUTYLATED HYDROXYTOLUENE	128-37-0	ACGIH	TWA(inhalable fraction and vapor):2 mg/m3	A4: Not class. as human carcin
FREE ISOCYANATES	26447-40-5	Manufacturer determined	TWA:0.005 ppm;STEL:0.02 ppm	
Fibrous glass	65997-17-3	Manufacturer determined	TWA(as dust):10 mg/m3	

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

Under normal use conditions, eye exposure is not expected to be significant enough to require eye protection. During cleanup or disposal of large amounts of product: 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:

Indirect Vented Goggles

### Skin/hand protection

Gloves providing sufficient protection must be worn while applying the casting tape. E.g. nitrile gloves with a minimum thickness of 0.127 mm (5 mil, 0.005 inch) have proven to provide effective protection. The cast surface should be free of monomer and polymer isocyanate within 30 minutes when proper wetting techniques are used.

### Respiratory protection

Results from air sampling during simulated product application show that vapours of methylenediphenyl-diisocyanate as used in the product are not detectable during use in Health Care facility cast rooms. Detection limits were extremely low and far below international safety recommendations for working with isocyanates. Under normal use conditions, airborne exposures are not expected to be significant enough to require respiratory protection. People with bronchial problems or with isocyanate sensitivity may still respond to low isocyanate concentrations. In general it is recommended to use synthetic casting material in rooms with normal general/dilution ventilation.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

<b>General Physical Form:</b>	Solid
<b>Specific Physical Form:</b>	Roll of Tape (Fiberglass knitted tape impregnated with moisture curable polyurethane prepolymer resin)
<b>Odor, Color, Grade:</b>	Slight odor; color is dependent on colorant used
<b>Odor threshold</b>	<i>No Data Available</i>
<b>pH</b>	<i>No Data Available</i>
<b>Melting point</b>	<i>No Data Available</i>
<b>Boiling Point</b>	<i>No Data Available</i>
<b>Flash Point</b>	No flash point
<b>Evaporation rate</b>	Negligible
<b>Flammability (solid, gas)</b>	Not Classified
<b>Flammable Limits(LEL)</b>	<i>No Data Available</i>
<b>Flammable Limits(UEL)</b>	<i>No Data Available</i>
<b>Vapor Pressure</b>	Negligible
<b>Vapor Density</b>	<i>No Data Available</i>
<b>Density</b>	1.1 g/ml
<b>Specific Gravity</b>	1.1 [Ref Std: WATER=1]
<b>Solubility in Water</b>	Nil
<b>Solubility- non-water</b>	<i>No Data Available</i>
<b>Partition coefficient: n-octanol/ water</b>	<i>No Data Available</i>
<b>Autoignition temperature</b>	<i>No Data Available</i>
<b>Decomposition temperature</b>	<i>No Data Available</i>
<b>Viscosity</b>	35,000 - 65,000 centipoise [@ 73.4 °F]
<b>Volatile Organic Compounds</b>	<i>No Data Available</i>
<b>Percent volatile</b>	Negligible
<b>VOC Less H2O &amp; Exempt Solvents</b>	<i>No Data Available</i>

## 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

Sparks and/or flames

## 10.5. Incompatible materials

Strong bases

Amines

Alcohols

Strong oxidizing agents

## 10.6. Hazardous decomposition products

<u>Substance</u>	<u>Condition</u>
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None known.	
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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:

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

#### Eye Contact:

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

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#### Ingestion:

May be harmful if swallowed.

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.

**Additional Information:**

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

Results from air sampling for simulated dry and wet product application show that vapours of methylenediphenyl-diisocyanate as used in the product are not detectable during use. Detection limits were extremely low and far below international safety recommendations for working with isocyanates. People with bronchial problems or with isocyanate sensitivity may still respond to low isocyanate concentrations.

Direct contact with the cast surface without the use of gloves should be avoided until curing has completed. The cast surface should be free of monomer and polymer isocyanate within 30 minutes when proper wetting techniques are used.

**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	Ingestion		No data available; calculated ATE 2,000 - 5,000 mg/kg
Fibrous glass	Dermal		LD50 estimated to be > 5,000 mg/kg
Fibrous glass	Ingestion		LD50 estimated to be 2,000 - 5,000 mg/kg
4,4'-DIPHENYLMETHANE DIISOCYANATE-POLYPROPYLENE GLYCOL POLYMER	Dermal		LD50 estimated to be > 5,000 mg/kg
4,4'-DIPHENYLMETHANE DIISOCYANATE-POLYPROPYLENE GLYCOL POLYMER	Ingestion		LD50 estimated to be 2,000 - 5,000 mg/kg
Diphenylmethane diisocyanate	Inhalation-Vapor		LC50 estimated to be 10 - 20 mg/l
Diphenylmethane diisocyanate	Dermal	Rabbit	LD50 > 5,000 mg/kg
Diphenylmethane diisocyanate	Inhalation-Dust/Mist (4 hours)	Rat	LC50 0.369 mg/l
Diphenylmethane diisocyanate	Ingestion	Rat	LD50 31,600 mg/kg
CALCIUM METASILICATE	Dermal		LD50 estimated to be > 5,000 mg/kg
CALCIUM METASILICATE	Ingestion		LD50 estimated to be 2,000 - 5,000 mg/kg
BHT - BUTYLATED HYDROXYTOLUENE	Dermal	Rat	LD50 > 2,000 mg/kg
BHT - BUTYLATED HYDROXYTOLUENE	Ingestion	Rat	LD50 > 2,930 mg/kg

ATE = acute toxicity estimate

**Skin Corrosion/Irritation**

Name	Species	Value
Fibrous glass	Professional judgement	No significant irritation
Diphenylmethane diisocyanate	official classification	Irritant
BHT - BUTYLATED HYDROXYTOLUENE	Human and animal	Minimal irritation

### Serious Eye Damage/Irritation

Name	Species	Value
Fibrous glass	Professional judgement	No significant irritation
Diphenylmethane diisocyanate	official classification	Severe irritant
BHT - BUTYLATED HYDROXYTOLUENE	Rabbit	Mild irritant

### Skin Sensitization

Name	Species	Value
Diphenylmethane diisocyanate	official classification	Sensitizing
BHT - BUTYLATED HYDROXYTOLUENE	Human	Some positive data exist, but the data are not sufficient for classification

### Respiratory Sensitization

Name	Species	Value
Diphenylmethane diisocyanate	Human	Sensitizing

### Germ Cell Mutagenicity

Name	Route	Value
Fibrous glass	In Vitro	Some positive data exist, but the data are not sufficient for classification
Diphenylmethane diisocyanate	In Vitro	Some positive data exist, but the data are not sufficient for classification
CALCIUM METASILICATE	In Vitro	Not mutagenic
BHT - BUTYLATED HYDROXYTOLUENE	In Vitro	Not mutagenic
BHT - BUTYLATED HYDROXYTOLUENE	In vivo	Not mutagenic

### Carcinogenicity

Name	Route	Species	Value
Fibrous glass	Inhalation	Multiple animal species	Some positive data exist, but the data are not sufficient for classification
Diphenylmethane diisocyanate	Inhalation	Rat	Some positive data exist, but the data are not sufficient for classification
BHT - BUTYLATED HYDROXYTOLUENE	Ingestion	Multiple animal species	Some positive data exist, but the data are not sufficient for classification

### Reproductive Toxicity

#### Reproductive and/or Developmental Effects

Name	Route	Value	Species	Test Result	Exposure Duration
Diphenylmethane diisocyanate	Inhalation	Some positive developmental data exist, but the data are not sufficient for classification	Rat	NOAEL 0.004 mg/l	during organogenesis
BHT - BUTYLATED HYDROXYTOLUENE	Ingestion	Not toxic to female reproduction	Rat	NOAEL 500 mg/kg/day	2 generation
BHT - BUTYLATED HYDROXYTOLUENE	Ingestion	Not toxic to male reproduction	Rat	NOAEL 500 mg/kg/day	2 generation
BHT - BUTYLATED HYDROXYTOLUENE	Ingestion	Some positive developmental data exist, but the data are not sufficient for classification	Rat	NOAEL 100 mg/kg/day	2 generation

**Target Organ(s)**

**Specific Target Organ Toxicity - single exposure**

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Diphenylmethane diisocyanate	Inhalation	respiratory irritation	May cause respiratory irritation	official classification	NOAEL Not available	

**Specific Target Organ Toxicity - repeated exposure**

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Fibrous glass	Inhalation	respiratory system	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL not available	occupational exposure
Diphenylmethane diisocyanate	Inhalation	respiratory system	Causes damage to organs through prolonged or repeated exposure	Rat	LOAEL 0.004 mg/l	13 weeks
CALCIUM METASILICATE	Inhalation	respiratory system	Some positive data exist, but the data are not sufficient for classification	Human	NOAEL Not available	occupational exposure
CALCIUM METASILICATE	Inhalation	pulmonary fibrosis	All data are negative	Human and animal	NOAEL Not available	
BHT - BUTYLATED HYDROXYTOLUENE	Ingestion	liver	May cause damage to organs though prolonged or repeated exposure	Rat	NOAEL 25 mg/kg/day	28 days
BHT - BUTYLATED HYDROXYTOLUENE	Ingestion	kidney and/or bladder	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 500 mg/kg/day	2 generation
BHT - BUTYLATED HYDROXYTOLUENE	Ingestion	blood	Some positive data exist, but the data are not sufficient for classification	Rat	LOAEL 420 mg/kg/day	40 days
BHT - BUTYLATED HYDROXYTOLUENE	Ingestion	endocrine system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 25 mg/kg/day	2 generation
BHT - BUTYLATED HYDROXYTOLUENE	Ingestion	heart	Some positive data exist, but the data are not sufficient for classification	Mouse	NOAEL 3,480 mg/kg/day	10 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.

## Target Organ(s)

During cleanup or disposal of open, uncured product, gloves providing sufficient protection must be worn. E.g. nitrile gloves with a minimum thickness of 0.127 mm (5 mil, 0.005 inch) have proven to provide effective protection. Additionally the following skin protection may be needed: laboratory coat or long-sleeve protective gauntlets. 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

### U.S. DEPARTMENT OF TRANSPORTATION

PROPER SHIPPING NAME: N/A  
HAZARD CLASS: N/A  
DOT SHIPPING ID NUMBER: N/A  
DOT PACKING GROUP: N/A  
DOT HAZARD CLASS: N/A  
DOT LABEL STATEMENT: N/A

### WATER TRANSPORTATION

PROPER SHIPPING NAME: N/A  
HAZARD CLASS: N/A  
ID NUMBER: N/A  
PACKING GROUP: N/A  
LABEL STATEMENTS: N/A

### AIR TRANSPORTATION

PROPER SHIPPING NAME: N/A  
HAZARD CLASS: N/A  
ID NUMBER: N/A  
PACKING GROUP: N/A  
LABEL STATEMENTS: N/A

SECTION 14 NOTES: N/A

## SECTION 15: Regulatory information

## SECTION 13: Disposal considerations

### 13.1. Disposal methods

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

**Target Organ(s)**

During cleanup or disposal of open, uncured product, gloves providing sufficient protection must be worn. E.g. nitrile gloves with a minimum thickness of 0.127 mm (5 mil, 0.005 inch) have proven to provide effective protection. Additionally the following skin protection may be needed: laboratory coat or long-sleeve protective gauntlets. 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 15: Regulatory information

### 15.1. US Federal Regulations

Contact McKesson for more information.

#### 311/312 Hazard Categories:

Fire Hazard - No    Pressure Hazard - No    Reactivity Hazard - No    Immediate Hazard - Yes    Delayed Hazard - No

### 15.2. State Regulations

Contact McKesson for more information.

### 15.3. Chemical Inventories

The components of this product are in compliance with the chemical notification requirements of TSCA. Commercial use of this material is regulated by the FDA.

Contact McKesson for more information.

### 15.4. International Regulations

Contact McKesson 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.

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USAGE OF TRADE. User is responsible for determining whether the McKesson product is fit for a particular purpose and suitable for user's method of use or application. Given the variety of factors that can affect the use and application of a McKesson product, some of which are uniquely within the user's knowledge and control, it is essential that the user evaluate the McKesson product to determine whether it is fit for a particular purpose and suitable for user's method of use or application.

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