



Safety Data Sheet

Copyright, 2015, 3M Company.

All rights reserved. Copying and/or downloading of this information for the purpose of properly utilizing 3M products is allowed provided that: (1) the information is copied in full with no changes unless prior written agreement is obtained from 3M, and (2) neither the copy nor the original is resold or otherwise distributed with the intention of earning a profit thereon.

| | | | |
|------------------------|-----------|-------------------------|----------|
| Document Group: | 22-2290-9 | Version Number: | 3.03 |
| Issue Date: | 04/17/15 | Supersedes Date: | 10/24/08 |

Product identifier

3M™ Super Fast Plastic Repair Adhesive PN 04247

ID Number(s):

LB-K100-0330-9, 41-0003-6681-9, 41-0003-8011-7, 41-3701-2156-2, 62-2644-3830-0

Recommended use

Industrial use

Supplier's details

| | |
|----------------------|---|
| MANUFACTURER: | 3M |
| DIVISION: | Automotive Aftermarket |
| 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:

22-1818-8, 22-1873-3

DISCLAIMER: The information in this Safety Data Sheet (SDS) is believed to be correct as of the date issued. 3M MAKES NO WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR COURSE OF PERFORMANCE OR USAGE OF TRADE. User is responsible for determining whether the 3M 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 3M product, some of which are uniquely within the user's knowledge and control, it is essential that the user evaluate the 3M product to determine whether it is fit for a particular purpose and suitable for user's method of use or application.

3M provides information in electronic form as a service to its customers. Due to the remote possibility that electronic transfer may have resulted in errors, omissions or alterations in this information, 3M makes no representations as to its completeness or accuracy. In addition, information obtained from a database may not be as current as the information in the SDS available directly from 3M

3M USA SDSs are available at www.3M.com



Safety Data Sheet

Copyright, 2014, 3M Company.

All rights reserved. Copying and/or downloading of this information for the purpose of properly utilizing 3M products is allowed provided that: (1) the information is copied in full with no changes unless prior written agreement is obtained from 3M, and (2) neither the copy nor the original is resold or otherwise distributed with the intention of earning a profit thereon.

| | | | |
|------------------------|-----------|-------------------------|----------|
| Document Group: | 22-1873-3 | Version Number: | 4.01 |
| Issue Date: | 08/11/14 | Supersedes Date: | 03/20/14 |

SECTION 1: Identification

1.1. Product identifier

3M™ DURAMIX™ Super Fast Plastic Repair Adhesive PN 04247 Accelerator (Part B)

Product Identification Numbers

LB-K100-0090-9

1.2. Recommended use and restrictions on use

Recommended use

Two-part urethane system., Industrial use

1.3. Supplier's details

| | |
|----------------------|---|
| MANUFACTURER: | 3M |
| DIVISION: | Automotive Aftermarket |
| 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

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

Serious Eye Damage/Irritation: Category 2A.

Skin Corrosion/Irritation: Category 2.

Skin Sensitizer: Category 1.

2.2. Label elements

Signal word

Warning

Symbols

Exclamation mark |

Pictograms

**Hazard Statements**

Causes serious eye irritation.
Causes skin irritation.
May cause an allergic skin reaction.

Precautionary Statements**General:**

Keep out of reach of children.

Prevention:

Avoid breathing dust/fume/gas/mist/vapors/spray.
Wear protective gloves and eye/face protection.
Wash thoroughly after handling.
Contaminated work clothing must not be allowed out of the workplace.

Response:

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.
Wash contaminated clothing before reuse.

Disposal:

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

2.3. Hazards not otherwise classified

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

18% of the mixture consists of ingredients of unknown acute inhalation toxicity.

SECTION 3: Composition/information on ingredients

| Ingredient | C.A.S. No. | % by Wt |
|--|------------|------------------------|
| Polyether Polyol | 9082-00-2 | 40 - 70 Trade Secret * |
| Propoxylated Trimethylolpropane | 25723-16-4 | 10 - 30 Trade Secret * |
| Tetrakis(2-Hydroxypropyl)Ethylenediamine | 102-60-3 | 10 - 30 Trade Secret * |
| M-Xylene-Alpha,Alpha'-Diamine | 1477-55-0 | 1 - 5 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:

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

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 dry chemical extinguisher 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
Oxides of Nitrogen

Condition

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

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. Warning! A motor could be an ignition source and could cause flammable gases or vapors in the spill area to burn or explode. 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

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.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid breathing of dust created by cutting, sanding, grinding or machining. Keep out of reach of children. 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. 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

Store away from acids. Store away from oxidizing agents.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational exposure limits

| Ingredient | C.A.S. No. | Agency | Limit type | Additional Comments |
|-------------------------------|------------|--------|----------------|---------------------|
| M-Xylene-Alpha,Alpha'-Diamine | 1477-55-0 | ACGIH | CEIL:0.1 mg/m3 | Skin Notation |

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

Provide appropriate local exhaust ventilation for cutting, grinding, sanding or machining. 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

Wear 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:

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: Butyl Rubber
Fluoroelastomer

Apron – Butyl rubber

Respiratory protection

In case of inadequate ventilation wear 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

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

| | |
|--|---|
| General Physical Form: | Liquid |
| Specific Physical Form: | Gel |
| Odor, Color, Grade: | Slight ammonia like odor, clear. |
| Odor threshold | <i>No Data Available</i> |
| pH | <i>Not Applicable</i> |
| Melting point | <i>No Data Available</i> |
| Boiling Point | >=400 °F |
| Flash Point | >=290 °F [<i>Test Method:</i> Tagliabue Closed Cup] |
| Evaporation rate | <=1 [<i>Ref Std:</i> WATER=1] |
| Flammability (solid, gas) | Not Applicable |
| Flammable Limits(LEL) | <i>Not Applicable</i> |
| Flammable Limits(UEL) | <i>Not Applicable</i> |
| Vapor Pressure | <i>Not Applicable</i> |
| Vapor Density | >=1 [<i>Ref Std:</i> AIR=1] |
| Density | 1.02 g/ml |
| Specific Gravity | 1.02 [<i>Ref Std:</i> WATER=1] |
| Solubility in Water | Negligible |
| Solubility- non-water | <i>No Data Available</i> |
| Partition coefficient: n-octanol/ water | <i>No Data Available</i> |
| Autoignition temperature | <i>Not Applicable</i> |
| Decomposition temperature | <i>No Data Available</i> |
| Viscosity | 1,300 - 2,000 centipoise |
| Hazardous Air Pollutants | 0 lb HAPS/gal [<i>Test Method:</i> Calculated] |
| Volatile Organic Compounds | 0 % weight [<i>Test Method:</i> calculated per CARB title 2] |
| Volatile Organic Compounds | 0 g/l [<i>Test Method:</i> calculated SCAQMD rule 443.1] |
| Percent volatile | <=1 % weight [<i>Test Method:</i> Estimated] |
| VOC Less H2O & Exempt Solvents | 0 g/l [<i>Test Method:</i> calculated SCAQMD rule 443.1] |

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

None known.

10.5. Incompatible materials

Strong acids
Strong oxidizing agents

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.

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.

Eye Contact:

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

Ingestion:

No health effects are expected.

Additional Information:

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

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 | Inhalation-Dust/Mist(4 hr) | | No data available; calculated ATE > 12.5 mg/l |
| Overall product | Ingestion | | No data available; calculated ATE > 5,000 mg/kg |
| Polyether Polyol | Dermal | Rabbit | LD50 > 5,000 mg/kg |
| Polyether Polyol | Ingestion | Rat | LD50 > 10,000 mg/kg |
| Propoxylated Trimethylolpropane | Dermal | Rat | LD50 > 2,000 mg/kg |
| Propoxylated Trimethylolpropane | Ingestion | Rat | LD50 > 2,500 mg/kg |

| | | | |
|---|--------------------------------|--------|--------------------|
| Tetrakis(2-Hydroxypropyl)Ethylendiamine | Dermal | Rabbit | LD50 > 2,000 mg/kg |
| Tetrakis(2-Hydroxypropyl)Ethylendiamine | Ingestion | Rat | LD50 3,280 mg/kg |
| M-Xylene-Alpha,Alpha'-Diamine | Dermal | Rabbit | LD50 > 2,000 mg/kg |
| M-Xylene-Alpha,Alpha'-Diamine | Inhalation-Dust/Mist (4 hours) | Rat | LC50 0.8 mg/l |
| M-Xylene-Alpha,Alpha'-Diamine | Ingestion | Rat | LD50 980 mg/kg |

ATE = acute toxicity estimate

Skin Corrosion/Irritation

| Name | Species | Value |
|-------------------------------|---------|-----------|
| M-Xylene-Alpha,Alpha'-Diamine | Rat | Corrosive |

Serious Eye Damage/Irritation

| Name | Species | Value |
|-------------------------------|---------|-----------|
| M-Xylene-Alpha,Alpha'-Diamine | Rabbit | Corrosive |

Skin Sensitization

| Name | Species | Value |
|-------------------------------|------------|-------------|
| M-Xylene-Alpha,Alpha'-Diamine | Guinea pig | Sensitizing |

Respiratory Sensitization

| Name | Species | Value |
|------|---------|-------|
|------|---------|-------|

Germ Cell Mutagenicity

| Name | Route | Value |
|-------------------------------|----------|---------------|
| M-Xylene-Alpha,Alpha'-Diamine | In Vitro | Not mutagenic |
| M-Xylene-Alpha,Alpha'-Diamine | In vivo | Not mutagenic |

Carcinogenicity

| Name | Route | Species | Value |
|------|-------|---------|-------|
|------|-------|---------|-------|

Reproductive Toxicity

Reproductive and/or Developmental Effects

| Name | Route | Value | Species | Test Result | Exposure Duration |
|-------------------------------|-----------|----------------------------------|---------|---------------------|-------------------|
| M-Xylene-Alpha,Alpha'-Diamine | Ingestion | Not toxic to female reproduction | Rat | NOAEL 450 mg/kg/day | 1 generation |
| M-Xylene-Alpha,Alpha'-Diamine | Ingestion | Not toxic to male reproduction | Rat | NOAEL 450 mg/kg | 1 generation |
| M-Xylene-Alpha,Alpha'-Diamine | Ingestion | Not toxic to development | Rat | NOAEL 450 mg/kg/day | 1 generation |

Target Organ(s)

Specific Target Organ Toxicity - single exposure

| Name | Route | Target Organ(s) | Value | Species | Test Result | Exposure Duration |
|-------------------------------|------------|------------------------|--|---------------|---------------------|-------------------|
| M-Xylene-Alpha,Alpha'-Diamine | Inhalation | respiratory irritation | Some positive data exist, but the data are not sufficient for classification | Not available | NOAEL Not available | |

Specific Target Organ Toxicity - repeated exposure

| Name | Route | Target Organ(s) | Value | Species | Test Result | Exposure Duration |
|-------------------------------|-----------|--|--|---------|---------------------|-------------------|
| M-Xylene-Alpha,Alpha'-Diamine | Ingestion | endocrine system blood bone marrow | Some positive data exist, but the data are not sufficient for classification | Rat | NOAEL 600 mg/kg/day | 28 days |

Aspiration Hazard

| Name | Value |
|------|-------|
|------|-------|

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. 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.

SECTION 14: Transport Information

Not regulated per U.S. DOT, IATA or IMO.

*These transportation classifications are provided as a customer service. As the shipper YOU remain responsible for complying with all applicable laws and regulations, including proper transportation classification and packaging. 3M transportation classifications are based on product formulation, packaging, 3M policies and 3M understanding of applicable current regulations. 3M does not guarantee the accuracy of this classification information. This information applies only to transportation classification and **not the packaging, labeling, or marking requirements**. The original 3M package is certified for U.S. ground shipment only. If you are shipping by air or ocean, the package may not meet applicable regulatory requirements.*

SECTION 15: Regulatory information

15.1. US Federal Regulations

Contact 3M 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 3M for more information.

15.3. Chemical Inventories

The components of this product are in compliance with the chemical notification requirements of TSCA.

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: 1 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: 2 Flammability: 1 Physical Hazard: 1 Personal Protection: X - See PPE section.

Hazardous Material Identification System (HMIS® III) 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® III ratings are to be used with a fully implemented HMIS® III program. HMIS® is a registered mark of the American Coatings Association (ACA).

| | | | |
|------------------------|-----------|-------------------------|----------|
| Document Group: | 22-1873-3 | Version Number: | 4.01 |
| Issue Date: | 08/11/14 | Supersedes Date: | 03/20/14 |

DISCLAIMER: The information in this Safety Data Sheet (SDS) is believed to be correct as of the date issued. 3M MAKES NO WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR COURSE OF PERFORMANCE OR USAGE OF TRADE. User is responsible for determining whether the 3M 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 3M product, some of which are uniquely within the user's knowledge and control, it is essential that the user evaluate the 3M product to determine whether it is fit for a particular purpose and suitable for user's method of use or application.

3M provides information in electronic form as a service to its customers. Due to the remote possibility that electronic transfer may have resulted in errors, omissions or alterations in this information, 3M makes no representations as to its completeness or accuracy. In addition, information obtained from a database may not be as current as the information in the SDS available directly from 3M

3M USA SDSs are available at www.3M.com



Safety Data Sheet

Copyright, 2015, 3M Company.

All rights reserved. Copying and/or downloading of this information for the purpose of properly utilizing 3M products is allowed provided that: (1) the information is copied in full with no changes unless prior written agreement is obtained from 3M, and (2) neither the copy nor the original is resold or otherwise distributed with the intention of earning a profit thereon.

| | | | |
|------------------------|-----------|-------------------------|----------|
| Document Group: | 22-1818-8 | Version Number: | 7.02 |
| Issue Date: | 12/01/15 | Supersedes Date: | 11/24/15 |

SECTION 1: Identification

1.1. Product identifier

04247 DURAMIX™ Super Fast Plastic Repair Adhesive (Part A)

Product Identification Numbers

LB-K100-0091-0

1.2. Recommended use and restrictions on use

Recommended use

Two-part urethane system., Industrial use

1.3. Supplier's details

| | |
|----------------------|---|
| MANUFACTURER: | 3M |
| DIVISION: | Automotive Aftermarket |
| 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

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

Acute Toxicity (inhalation): Category 3.
Serious Eye Damage/Irritation: Category 2A.
Skin Corrosion/Irritation: Category 2.
Respiratory Sensitizer: Category 1.
Skin Sensitizer: Category 1.
Specific Target Organ Toxicity (respiratory irritation): Category 3.
Specific Target Organ Toxicity (repeated exposure): Category 1.

2.2. Label elements

Signal word

Danger

Symbols

Skull and crossbones | Exclamation mark | Health Hazard |

Pictograms



Hazard Statements

Toxic if inhaled.
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 eye/face 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: Remove person to fresh air and keep comfortable for breathing.
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 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.
Call a POISON CENTER or doctor/physician.
Get medical advice/attention if you feel unwell.

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.

2.3. Hazards not otherwise classified

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

23% of the mixture consists of ingredients of unknown acute oral toxicity.
 23% of the mixture consists of ingredients of unknown acute dermal toxicity.
 24% of the mixture consists of ingredients of unknown acute inhalation toxicity.

SECTION 3: Composition/information on ingredients

| Ingredient | C.A.S. No. | % by Wt |
|---|------------|------------------------|
| P,P'-Methylenebis(Phenyl Isocyanate) | 101-68-8 | 30 - 60 Trade Secret * |
| Castor Oil, Polymer With 1,1'-Methylenebis[4-Isocyanatobenzene] | 68424-09-9 | 15 - 40 Trade Secret * |
| 4,4'-Diisocyanatodiphenylmethane polymer | 25686-28-6 | 10 - 30 Trade Secret * |
| 3-(Trimethoxysilyl)Propyl Glycidyl Ether | 2530-83-8 | 1 - 5 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. 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:

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

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

Condition

During Combustion
 During Combustion
 During Combustion

Oxides of Nitrogen
Toxic Vapor, Gas, Particulate

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

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. For larger spills, cover drains and build dikes to prevent entry into sewer systems or bodies of water.

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.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

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. 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 acids. Store away from strong bases.

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 |
|--|------------|-------------------------|---------------------------------------|---------------------|
| FREE ISOCYANATES | 101-68-8 | Manufacturer determined | TWA:0.005 ppm;STEL:0.02 ppm | |
| P,P'-Methylenebis(Phenyl Isocyanate) | 101-68-8 | ACGIH | TWA:0.005 ppm | |
| P,P'-Methylenebis(Phenyl Isocyanate) | 101-68-8 | OSHA | CEIL:0.2 mg/m ³ (0.02 ppm) | |
| 3-(Trimethoxysilyl)Propyl Glycidyl Ether | 2530-83-8 | CMRG | TWA:5 ppm | |

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

Provide appropriate local exhaust ventilation for cutting, grinding, sanding or machining. 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:

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: Butyl Rubber
Nitrile 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 – Nitrile

Respiratory protection

In case of inadequate ventilation wear 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

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

| | |
|--------------------------------|---|
| General Physical Form: | Liquid |
| Specific Physical Form: | Viscous |
| Odor, Color, Grade: | Low or no detectable odor, clear. |
| Odor threshold | <i>No Data Available</i> |
| pH | <i>Not Applicable</i> |
| Melting point | <i>No Data Available</i> |
| Boiling Point | >=400 °F |
| Flash Point | >=290 °F [<i>Test Method: Tagliabue Closed Cup</i>] |
| Evaporation rate | <=1 [<i>Details: Gels with exposure to humidity.</i>] |

| | |
|---|--|
| Flammability (solid, gas) | Not Applicable |
| Flammable Limits(LEL) | <i>Not Applicable</i> |
| Flammable Limits(UEL) | <i>Not Applicable</i> |
| Vapor Pressure | <=0.000004 mmHg [@ 68 °F] |
| Vapor Density | >=1 [<i>Ref Std: AIR=1</i>] |
| Density | 1.1 g/ml |
| Specific Gravity | 1.1 [<i>Ref Std: WATER=1</i>] |
| Solubility in Water | Negligible |
| Solubility- non-water | <i>No Data Available</i> |
| Partition coefficient: n-octanol/ water | <i>No Data Available</i> |
| Autoignition temperature | <i>Not Applicable</i> |
| Decomposition temperature | <i>No Data Available</i> |
| Viscosity | 1,000 - 2,000 centipoise |
| Hazardous Air Pollutants | 42.133 lb HAPS/lb solids |
| Molecular weight | <i>No Data Available</i> |
| Volatile Organic Compounds | 22 g/l [<i>Test Method: calculated SCAQMD rule 443.1</i>] |
| Volatile Organic Compounds | 2.0 % weight [<i>Test Method: calculated per CARB title 2</i>] |
| Percent volatile | 2.0 % weight [<i>Test Method: Estimated</i>] |
| VOC Less H2O & Exempt Solvents | 22 g/l [<i>Test Method: calculated SCAQMD rule 443.1</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

None known.

10.5. Incompatible materials

Water
Strong acids
Strong bases

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:

Toxic if inhaled.

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.

Dust from cutting, grinding, sanding or machining may cause irritation of the respiratory system. Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

May cause target organ effects after inhalation. 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.

Eye 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.

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

| Name | Route | Species | Value |
|--|--------------------------------|---------|---|
| Overall product | Dermal | | No data available; calculated ATE > 5,000 mg/kg |
| Overall product | Inhalation-Vapor(4 hr) | | No data available; calculated ATE 2 - 10 mg/l |
| Overall product | Ingestion | | No data available; calculated ATE > 5,000 mg/kg |
| P,P'-Methylenebis(Phenyl Isocyanate) | Inhalation-Vapor | | LC50 estimated to be 10 - 20 mg/l |
| P,P'-Methylenebis(Phenyl Isocyanate) | Dermal | Rabbit | LD50 > 5,000 mg/kg |
| P,P'-Methylenebis(Phenyl Isocyanate) | Inhalation-Dust/Mist (4 hours) | Rat | LC50 0.369 mg/l |
| P,P'-Methylenebis(Phenyl Isocyanate) | Ingestion | Rat | LD50 31,600 mg/kg |
| 4,4'-Diisocyanatodiphenylmethane polymer | Inhalation-Vapor | | LC50 estimated to be 10 - 20 mg/l |
| 4,4'-Diisocyanatodiphenylmethane polymer | Dermal | Rabbit | LD50 > 5,000 mg/kg |

| | | | |
|--|--------------------------------|--------|-------------------|
| 4,4'-Diisocyanatodiphenylmethane polymer | Inhalation-Dust/Mist (4 hours) | Rat | LC50 0.369 mg/l |
| 4,4'-Diisocyanatodiphenylmethane polymer | Ingestion | Rat | LD50 31,600 mg/kg |
| 3-(Trimethoxysilyl)Propyl Glycidyl Ether | Dermal | Rabbit | LD50 4,000 mg/kg |
| 3-(Trimethoxysilyl)Propyl Glycidyl Ether | Inhalation-Dust/Mist (4 hours) | Rat | LC50 > 5.3 mg/l |
| 3-(Trimethoxysilyl)Propyl Glycidyl Ether | Ingestion | Rat | LD50 7,010 mg/kg |

ATE = acute toxicity estimate

Skin Corrosion/Irritation

| Name | Species | Value |
|--|-------------------------|---------------|
| P,P'-Methylenebis(Phenyl Isocyanate) | official classification | Irritant |
| 4,4'-Diisocyanatodiphenylmethane polymer | official classification | Irritant |
| 3-(Trimethoxysilyl)Propyl Glycidyl Ether | Rabbit | Mild irritant |

Serious Eye Damage/Irritation

| Name | Species | Value |
|--|-------------------------|-----------------|
| P,P'-Methylenebis(Phenyl Isocyanate) | official classification | Severe irritant |
| 4,4'-Diisocyanatodiphenylmethane polymer | official classification | Severe irritant |
| 3-(Trimethoxysilyl)Propyl Glycidyl Ether | Rabbit | Corrosive |

Skin Sensitization

| Name | Species | Value |
|--|-------------------------|--|
| P,P'-Methylenebis(Phenyl Isocyanate) | official classification | Sensitizing |
| 4,4'-Diisocyanatodiphenylmethane polymer | official classification | Sensitizing |
| 3-(Trimethoxysilyl)Propyl Glycidyl Ether | Guinea pig | Some positive data exist, but the data are not sufficient for classification |

Respiratory Sensitization

| Name | Species | Value |
|--|---------|-------------|
| P,P'-Methylenebis(Phenyl Isocyanate) | Human | Sensitizing |
| 4,4'-Diisocyanatodiphenylmethane polymer | Human | Sensitizing |

Germ Cell Mutagenicity

| Name | Route | Value |
|--|----------|--|
| P,P'-Methylenebis(Phenyl Isocyanate) | In Vitro | Some positive data exist, but the data are not sufficient for classification |
| 4,4'-Diisocyanatodiphenylmethane polymer | In Vitro | Some positive data exist, but the data are not sufficient for classification |
| 3-(Trimethoxysilyl)Propyl Glycidyl Ether | In vivo | Not mutagenic |
| 3-(Trimethoxysilyl)Propyl Glycidyl Ether | In Vitro | Some positive data exist, but the data are not sufficient for classification |

Carcinogenicity

| Name | Route | Species | Value |
|------|-------|---------|-------|
|------|-------|---------|-------|

| | | | |
|--|------------|-------|--|
| P,P'-Methylenebis(Phenyl Isocyanate) | Inhalation | Rat | Some positive data exist, but the data are not sufficient for classification |
| 4,4'-Diisocyanatodiphenylmethane polymer | Inhalation | Rat | Some positive data exist, but the data are not sufficient for classification |
| 3-(Trimethoxysilyl)Propyl Glycidyl Ether | Dermal | Mouse | Not carcinogenic |

Reproductive Toxicity

Reproductive and/or Developmental Effects

| Name | Route | Value | Species | Test Result | Exposure Duration |
|--|------------|--|---------|-----------------------|----------------------|
| P,P'-Methylenebis(Phenyl Isocyanate) | Inhalation | Some positive developmental data exist, but the data are not sufficient for classification | Rat | NOAEL 0.004 mg/l | during organogenesis |
| 4,4'-Diisocyanatodiphenylmethane polymer | Inhalation | Some positive developmental data exist, but the data are not sufficient for classification | Rat | NOAEL 0.004 mg/l | during organogenesis |
| 3-(Trimethoxysilyl)Propyl Glycidyl Ether | Ingestion | Not toxic to female reproduction | Rat | NOAEL 1,000 mg/kg/day | 1 generation |
| 3-(Trimethoxysilyl)Propyl Glycidyl Ether | Ingestion | Not toxic to male reproduction | Rat | NOAEL 1,000 mg/kg/day | 1 generation |
| 3-(Trimethoxysilyl)Propyl Glycidyl Ether | Ingestion | Some positive developmental data exist, but the data are not sufficient for classification | Rat | NOAEL 3,000 mg/kg/day | during organogenesis |

Target Organ(s)

Specific Target Organ Toxicity - single exposure

| Name | Route | Target Organ(s) | Value | Species | Test Result | Exposure Duration |
|--|------------|------------------------|----------------------------------|-------------------------|---------------------|-------------------|
| P,P'-Methylenebis(Phenyl Isocyanate) | Inhalation | respiratory irritation | May cause respiratory irritation | official classification | NOAEL Not available | |
| 4,4'-Diisocyanatodiphenylmethane polymer | 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 |
|--|------------|---|--|---------|-----------------------|-------------------|
| 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 |
| 4,4'-Diisocyanatodiphenylmethane polymer | Inhalation | respiratory system | Causes damage to organs through prolonged or repeated exposure | Rat | LOAEL 0.004 mg/l | 13 weeks |
| 3-(Trimethoxysilyl)Propyl Glycidyl Ether | Ingestion | heart endocrine system bone, teeth, nails, and/or hair hematopoietic system liver immune system nervous system kidney and/or bladder respiratory system | All data are negative | Rat | NOAEL 1,000 mg/kg/day | 28 days |

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.

SECTION 14: Transport Information

Not regulated per U.S. DOT, IATA or IMO.

These transportation classifications are provided as a customer service. As the shipper YOU remain responsible for complying with all applicable laws and regulations, including proper transportation classification and packaging. 3M transportation classifications are based on product formulation, packaging, 3M policies and 3M understanding of applicable current regulations. 3M does not guarantee the accuracy of this classification information. This information applies only to transportation classification and not the packaging, labeling, or marking requirements. The original 3M package is certified for U.S. ground shipment only. If you are shipping by air or ocean, the package may not meet applicable regulatory requirements.

SECTION 15: Regulatory information**15.1. US Federal Regulations**

Contact 3M for more information.

311/312 Hazard Categories:

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

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

| Ingredient | C.A.S. No | % by Wt |
|---|------------------|----------------------|
| P,P'-Methylenebis(Phenyl Isocyanate) | 101-68-8 | Trade Secret 30 - 60 |
| P,P'-Methylenebis(Phenyl Isocyanate) (Benzene, 1,1'-methylenebis[4-isocyanato-) | 101-68-8 | 30 - 60 |
| P,P'-Methylenebis(Phenyl Isocyanate) (DIISOCYANATES (CERTAIN CHEMICALS ONLY)) | 101-68-8 | 30 - 60 |

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.

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: 3 **Flammability:** 1 **Instability:** 1 **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: *1 **Flammability:** 1 **Physical Hazard:** 1 **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).

| | | | |
|------------------------|-----------|-------------------------|----------|
| Document Group: | 22-1818-8 | Version Number: | 7.02 |
| Issue Date: | 12/01/15 | Supersedes Date: | 11/24/15 |

DISCLAIMER: The information in this Safety Data Sheet (SDS) is believed to be correct as of the date issued. 3M MAKES NO WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR COURSE OF PERFORMANCE OR USAGE OF TRADE. User is responsible for determining whether the 3M 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 3M product, some of which are uniquely within the user's knowledge and control, it is essential that the user evaluate the 3M product to determine whether it is fit for a particular purpose and suitable for user's method of use or application.

3M provides information in electronic form as a service to its customers. Due to the remote possibility that electronic transfer may have resulted in errors, omissions or alterations in this information, 3M makes no representations as to its completeness or accuracy. In addition, information obtained from a database may not be as current as the information in the SDS available directly from 3M

3M USA SDSs are available at www.3M.com