



# **Safety Data Sheet**

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## **SECTION 1: Identification**

### 1.1. Product identifier

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

#### **Product Identification Numbers**

ID Number UPC ID Number UPC

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.

### Disposal:

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

## **Supplemental Information:**

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	< 3 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.

### **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**

SubstanceConditionCarbon 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

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. 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

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

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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

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. Avoid release to the environment. 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

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>
M-Xylene-Alpha, Alpha'-Diamine	1477-55-0	ACGIH	CEIL:0.018 ppm	SKIN

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)

#### **Eve/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

Neoprene

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 – Butyl rubber Apron - Neoprene

## 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:**Gel

Odor, Color, Grade: Slight ammonia like odor, clear.

Odor thresholdNo Data AvailablepHNot ApplicableMelting pointNo Data Available

**Boiling Point** >=400 °F

Flash Point >=290 °F [Test Method: Tagliabue Closed Cup]

**Evaporation rate** <=1 [*Ref Std*:WATER=1]

Flammability (solid, gas)

Flammable Limits(LEL)

Flammable Limits(UEL)

Vapor Pressure

Vapor Density

Not Applicable

Not Applicable

Not Applicable

Not Applicable

Not Applicable

Not Applicable

**Density** 1.02 g/ml

Specific Gravity 1.02 [Ref Std:WATER=1]

Solubility in WaterNegligibleSolubility- non-waterNo Data AvailablePartition coefficient: n-octanol/ waterNo Data AvailableAutoignition temperatureNot ApplicableDecomposition temperatureNo Data AvailableViscosity1,300 - 2,000 centipoise

Hazardous Air Pollutants 0 lb HAPS/lb solids [Test Method: Calculated]

**Molecular weight** No Data Available

Volatile Organic Compounds0 % weight [Test Method:calculated per CARB title 2]Volatile Organic Compounds0 g/l [Test Method:calculated SCAQMD rule 443.1]

**Percent volatile** <=1 % weight [Test Method: Estimated]

VOC Less H2O & Exempt Solvents 0 g/l [Test Method: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.

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#### 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

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:**

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 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

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## 3MTM DURAMIXTM Super Fast Plastic Repair Adhesive PN 04247 Accelerator (Part B)

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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)Ethylenediamine	Dermal	Rat	LD50 > 2,000 mg/kg
Tetrakis(2-Hydroxypropyl)Ethylenediamine	Ingestion	Rat	LD50 2,890 mg/kg
M-Xylene-Alpha,Alpha'-Diamine	Dermal	Rabbit	LD50 > 2,000 mg/kg
M-Xylene-Alpha,Alpha'-Diamine	Inhalation-	Rat	LC50 1.2 mg/l
	Dust/Mist (4 hours)		-
M-Xylene-Alpha, Alpha'-Diamine	Ingestion	Rat	LD50 980 mg/kg

ATE = acute toxicity estimate

## Skin Corrosion/Irritation

Name S		Value
Propoxylated Trimethylolpropane	Rabbit	No significant irritation
Tetrakis(2-Hydroxypropyl)Ethylenediamine	Rabbit	No significant irritation
M-Xylene-Alpha, Alpha'-Diamine	Rat	Corrosive

Serious Eye Damage/Irritation

Name	Species	Value
Propoxylated Trimethylolpropane		Mild irritant
Tetrakis(2-Hydroxypropyl)Ethylenediamine		Severe irritant
M-Xylene-Alpha, Alpha'-Diamine	Rabbit	Corrosive

## **Skin Sensitization**

Name	Species	Value
Tetrakis(2-Hydroxypropyl)Ethylenediamine	Guinea	Not classified
	pig	
M-Xylene-Alpha, Alpha'-Diamine	Guinea	Sensitizing
	pig	

## **Respiratory Sensitization**

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

**Germ Cell Mutagenicity** 

our management						
Name	Route	Value				
Tetrakis(2-Hydroxypropyl)Ethylenediamine	In Vitro	Not mutagenic				
M-Xylene-Alpha, Alpha'-Diamine	In Vitro	Not mutagenic				
M-Xylene-Alpha, Alpha'-Diamine	In vivo	Not mutagenic				

### Carcinogenicity

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

## **Reproductive Toxicity**

Reproductive and/or Developmental Effects

Reproductive and/or Developmental Effects							
Name	Route	Value	Species	Test Result	Exposure		
					Duration		
Tetrakis(2-Hydroxypropyl)Ethylenediamine	Ingestion	Not classified for female reproduction	Rat	NOAEL 1,000	premating		
				mg/kg/day	into lactation		
Tetrakis(2-Hydroxypropyl)Ethylenediamine	Ingestion	Not classified for male reproduction	Rat	NOAEL 1,000	30 days		
	_	_		mg/kg/day	-		

Tetrakis(2-Hydroxypropyl)Ethylenediamine	Ingestion	Not classified for development	Rat	NOAEL 1,000	premating
				mg/kg/day	into lactation
M-Xylene-Alpha,Alpha'-Diamine	Ingestion	Not classified for female reproduction	Rat	NOAEL 450	1 generation
				mg/kg/day	
M-Xylene-Alpha, Alpha'-Diamine	Ingestion	Not classified for male reproduction	Rat	NOAEL 450	1 generation
				mg/kg	
M-Xylene-Alpha, Alpha'-Diamine	Ingestion	Not classified for development	Rat	NOAEL 450	1 generation
				mg/kg/day	

## Target Organ(s)

**Specific Target Organ Toxicity - single exposure** 

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Tetrakis(2-	Inhalation	respiratory irritation	Some positive data exist, but the	similar	NOAEL	
Hydroxypropyl)Ethylenedi			data are not sufficient for	health	Positive	
amine			classification	hazards		
M-Xylene-Alpha, Alpha'-	Inhalation	respiratory irritation	Some positive data exist, but the	Not	NOAEL Not	
Diamine			data are not sufficient for	available	avaliable	
			classification			

**Specific Target Organ Toxicity - repeated exposure** 

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Tetrakis(2- Hydroxypropyl)Ethylenedi amine	Ingestion	nervous system	Some positive data exist, but the data are not sufficient for classification	Rat	NOAEL 300 mg/kg/day	30 days
Tetrakis(2- Hydroxypropyl)Ethylenedi amine	Ingestion	heart   skin   endocrine system   gastrointestinal tract   bone, teeth, nails, and/or hair   hematopoietic system   liver   immune system   muscles   eyes   kidney and/or bladder   respiratory system   vascular system	Not classified	Rat	NOAEL 1,000 mg/kg/day	30 days
M-Xylene-Alpha,Alpha'- Diamine	Ingestion	endocrine system   blood   bone marrow	Not classified	Rat	NOAEL 600 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**

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#### 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.

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

## Physical Hazards

Not applicable

#### **Health Hazards**

Respiratory or Skin Sensitization

Serious eve damage or eve irritation

Skin Corrosion or 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.

# **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: 2 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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