# Safety Data Sheet

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| **Document Group:** | 32-6751-5 | **Version Number:** | 7.00 |
| **Issue Date:** | 09/17/26 | **Supersedes Date:** | 08/12/25 |

## SECTION 1: Identification

**1.1. Product identifier**
3M™ Liquid Pavement Marking 5050 Crosslinker Part B

**Product Identification Numbers**
LE-N100-1630-3, LE-N100-1579-4, LE-N100-1630-2, 42-0026-6936-6, 75-0302-4336-6, 75-0302-4573-4, 75-0302-8820-5, 75-0303-1188-2
7010390954, 7010389748, 7100207579, 7100376832

**1.2. Recommended use and restrictions on use**

**Recommended use**
Part B of a two part pavement marking.

**1.3. Supplier's details**

| | |
|---|---|
| **MANUFACTURER:** | 3M |
| **DIVISION:** | Commercial Branding and Transportation Division |
| **ADDRESS:** | 3M Center, St. Paul, MN 55144-1000, USA |
| **Telephone:** | 1-888-3M HELPS (1-888-364-3577) |

**1.4. Emergency telephone number**
1-800-364-3577 or (651) 737-6501 (24 hours)

## SECTION 2: Hazard identification

**2.1. Hazard classification**
Acute Toxicity (inhalation): Category 4.
Respiratory Sensitizer: Category 1.
Skin Sensitizer: Category 1.
Specific Target Organ Toxicity (single exposure): Category 3.

**2.2. Label elements**
**Signal word**
Danger

**Symbols**
Exclamation mark |Health Hazard |

**Pictograms**



**Hazard Statements**

Harmful if inhaled.
May cause allergy or asthma symptoms or breathing difficulties if inhaled.
May cause an allergic skin reaction.
May cause respiratory irritation.

**Precautionary statements**

**Prevention:**
Avoid breathing vapor or spray.
Use only outdoors or in a well-ventilated area.
Contaminated work clothing should not be allowed out of the workplace.
Wear protective gloves.
In case of inadequate ventilation wear respiratory protection.

**Response:**
IF ON SKIN: Wash with plenty of soap and water.
IF INHALED: Call a POISON CENTER or doctor if you feel unwell.
IF INHALED: Remove person to fresh air and keep comfortable for breathing.
If experiencing respiratory symptoms or if skin irritation or rash occurs: Call a POISON CENTER or doctor.
Take off contaminated clothing and wash it before reuse.

**Storage:**
Store in a well-ventilated place. Keep container tightly closed.
Store locked up.

**Disposal:**
Dispose of contents and container in accordance with applicable local, regional, national, and international regulations.

**Supplemental Information:**
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 |
|---|---|---|
| Hexamethylene diisocyanate homopolymer | 28182-81-2 | 80 - 100 Trade Secret * |
| Hexamethylene diisocyanate | 822-06-0 | <= 0.2 |

*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**
No critical symptoms or effects. 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**
DO NOT USE WATER In case of fire: Use a dry chemical extinguisher to extinguish.

**5.2. Special hazards arising from the substance or mixture**
Closed containers exposed to heat from fire may build pressure and explode.

**Hazardous Decomposition or By-Products**

| Substance | Condition |
|---|---|
| Isocyanates | During Combustion |
| Carbon monoxide | During Combustion |
| Carbon dioxide | During Combustion |
| Hydrogen Cyanide | During Combustion |
| Oxides of Nitrogen | During Combustion |

**5.3. Special protective actions for fire-fighters**
No special protective actions for fire-fighters are anticipated.

## SECTION 6: Accidental release measures

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

**6.2. Environmental precautions**
Avoid release to the environment.

**6.3. Methods and material for containment and cleaning up**
Contain spill. Pour isocyanate decontaminant solution (90% water, 8% concentrated ammonia, 2% detergent) on spill and allow to react for 10 minutes. Or pour water on spill and allow to react for more than 30 minutes. Cover with absorbent material. Working from around the edges of the spill inward, cover with bentonite, vermiculite, or commercially available

inorganic absorbent material. Mix in sufficient absorbent until it appears dry. Remember, adding an absorbent material does not remove a physical, health, or environmental hazard. Collect as much of the spilled material as possible. Place in a container approved for transportation by appropriate authorities, but do not seal the container for 48 hours to avoid pressure build-up. Clean up residue with an appropriate solvent selected by a qualified and authorized person. Ventilate the area with fresh air. Read and follow safety precautions on the solvent label and SDS. Dispose of collected material as soon as possible in accordance with applicable local/regional/national/international regulations.

## SECTION 7: Handling and storage

**7.1. Precautions for safe handling**
For industrial/occupational use only. Not for consumer sale or use. 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.

**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 strong bases. Store away from amines.

## SECTION 8: Exposure controls/personal protection

**8.1. Control parameters**

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

| Ingredient | C.A.S. No. | Agency | Limit type | Additional Comments |
|---|---|---|---|---|
| Hexamethylene diisocyanate | 822-06-0 | ACGIH | TWA:0.005 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**
Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below relevant Exposure Limits and/or control dust/fume/gas/mist/vapors/spray. If ventilation is not adequate, use respiratory protection equipment.

**8.2.2. Personal protective equipment (PPE)**

**Eye/face protection**

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

**Skin/hand protection**
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. Note: Nitrile gloves may be worn over polymer laminate gloves to improve dexterity.

For prolonged or repeated contact, gloves made from the following material(s) are recommended (breakthrough times are >4 hours): Butyl Rubber, Polymer laminate

Any glove recommended for prolonged/repeated contact is also suitable for short-term/splash contact.

If this product is used in a manner that presents a higher potential for exposure (e.g., spraying, high splash potential, etc.), then use of a protective apron may be necessary. See recommended glove material(s) for determining appropriate apron material(s). If a glove material is not available as an apron, polymer laminate is a suitable option.

**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**

| | |
|---|---|
| **Physical state** | Liquid |
| **Specific Physical Form:** | Liquid |
| **Color** | Light Yellow |
| **Odor** | Nearly Odorless |
| **Odor threshold** | *No Data Available* |
| **pH** | *Not Applicable* |
| **Melting point** | *Not Applicable* |
| **Boiling Point** | No boiling point [*Details:*Decomposes before boiling] |
| **Flash Point** | 460.4 ºF [*Test Method:*Closed Cup] |
| **Evaporation rate** | *No Data Available* |
| **Flammability** | Not Applicable |
| **Flammable Limits(LEL)** | *No Data Available* |
| **Flammable Limits(UEL)** | *No Data Available* |
| **Vapor Pressure** | Approximately 0.0000000052 mmHg [@ 20 ºC] |
| **Relative Vapor Density** | *No Data Available* |
| **Density** | 1.16 g/ml [@ 68 ºF] |
| **Relative Density** | 1.16 [@ 20 ºC ] [*Ref Std:*WATER=1] |
| **Solubility in Water** | Nil |
| **Solubility- non-water** | *No Data Available* |
| **Partition coefficient: n-octanol/ water** | *No Data Available* |
| **Autoignition temperature** | *No Data Available* |
| **Decomposition temperature** | *No Data Available* |
| **Kinematic Viscosity** | *No Data Available* |
| **Molecular weight** | *Not Applicable* |
| **Volatile Organic Compounds** | 0.2 % |
| **Percent volatile** | *No Data Available* |
| **Percent volatile** | Negligible |
| **VOC Less H2O & Exempt Solvents** | *No Data Available* |
| **Particle Characteristics** | *Not Applicable* |

## 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 may occur. Contact with moisture or other materials that react with isocyanates or temperature over 400 F (204 C) may cause polymerization

**10.4. Conditions to avoid**
Sparks and/or flames

**10.5. Incompatible materials**
Strong bases
Amines
Alcohols
Water

**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:**
Harmful 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.

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

**Ingestion:**

No known health effects.

**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 |
|---|---|---|---|
| Hexamethylene diisocyanate homopolymer | Inhalation-Dust/Mist (4 hours) | Professional judgement | LC50 estimated to be 1 - 5 mg/l |
| Hexamethylene diisocyanate homopolymer | Dermal | Rabbit | LD50 > 5,000 mg/kg |
| Hexamethylene diisocyanate homopolymer | Ingestion | Rat | LD50 > 5,000 mg/kg |
| Hexamethylene diisocyanate | Dermal | Rat | LD50 > 7,000 mg/kg |
| Hexamethylene diisocyanate | Inhalation-Dust/Mist (4 hours) | Rat | LC50 0.124 mg/l |
| Hexamethylene diisocyanate | Inhalation-Vapor (4 hours) | Rat | LC50 0.124 mg/l |
| Hexamethylene diisocyanate | Ingestion | Rat | LD50 746 mg/kg |

ATE = acute toxicity estimate

**Skin Corrosion/Irritation**

| Name | Species | Value |
|---|---|---|
| Hexamethylene diisocyanate homopolymer | Rabbit | Minimal irritation |
| Hexamethylene diisocyanate | Rabbit | Corrosive |

**Serious Eye Damage/Irritation**

| Name | Species | Value |
|---|---|---|
| Hexamethylene diisocyanate homopolymer | Rabbit | Mild irritant |
| Hexamethylene diisocyanate | Rabbit | Corrosive |

**Skin Sensitization**

| Name | Species | Value |
|---|---|---|
| Hexamethylene diisocyanate homopolymer | Guinea pig | Sensitizing |
| Hexamethylene diisocyanate | Multiple animal species | Sensitizing |

**Respiratory Sensitization**

| Name | Species | Value |
|---|---|---|
| Hexamethylene diisocyanate homopolymer | similar compounds | Not classified |
| Hexamethylene diisocyanate | Human and animal | Sensitizing |

**Germ Cell Mutagenicity**

| Name | Route | Value |
|---|---|---|
| Hexamethylene diisocyanate homopolymer | In Vitro | Not mutagenic |

| | | |
|---|---|---|
| Hexamethylene diisocyanate homopolymer | In vivo | Not mutagenic |
| Hexamethylene diisocyanate | In Vitro | Not mutagenic |
| Hexamethylene diisocyanate | In vivo | Not mutagenic |

**Carcinogenicity**

| Name | Route | Species | Value |
|---|---|---|---|
| Hexamethylene diisocyanate | Inhalation | Rat | Not carcinogenic |

**Reproductive Toxicity**

**Reproductive and/or Developmental Effects**

| Name | Route | Value | Species | Test Result | Exposure Duration |
|---|---|---|---|---|---|
| Hexamethylene diisocyanate | Inhalation | Not classified for female reproduction | Rat | NOAEL 0.002 mg/l | 7 weeks |
| Hexamethylene diisocyanate | Inhalation | Not classified for development | Rat | NOAEL 0.002 mg/l | 7 weeks |
| Hexamethylene diisocyanate | Inhalation | Not classified for male reproduction | Rat | NOAEL 0.014 mg/l | 4 weeks |

**Target Organ(s)**

**Specific Target Organ Toxicity - single exposure**

| Name | Route | Target Organ(s) | Value | Species | Test Result | Exposure Duration |
|---|---|---|---|---|---|---|
| Hexamethylene diisocyanate homopolymer | Inhalation | respiratory irritation | May cause respiratory irritation | | NOAEL Not available | |
| Hexamethylene diisocyanate | Inhalation | respiratory irritation | May cause respiratory irritation | Human and animal | NOAEL Not available | |
| Hexamethylene diisocyanate | Inhalation | blood | Not classified | Human | NOAEL Not available | occupational exposure |

**Specific Target Organ Toxicity - repeated exposure**

| Name | Route | Target Organ(s) | Value | Species | Test Result | Exposure Duration |
|---|---|---|---|---|---|---|
| Hexamethylene diisocyanate homopolymer | Inhalation | immune system | Not classified | Rat | NOAEL 0.084 mg/l | 2 weeks |
| Hexamethylene diisocyanate homopolymer | Inhalation | blood | Not classified | Rat | NOAEL 0.084 mg/l | 2 weeks |
| Hexamethylene diisocyanate | Inhalation | liver | Not classified | Rat | NOAEL 0.002 mg/l | 3 weeks |
| Hexamethylene diisocyanate | Inhalation | kidney and/or bladder | Not classified | Rat | NOAEL 0.002 mg/l | 3 weeks |
| Hexamethylene diisocyanate | Inhalation | endocrine system | Not classified | Rat | NOAEL 0.0014 mg/l | 4 weeks |
| Hexamethylene diisocyanate | Inhalation | blood | Not classified | Rat | NOAEL 0.0012 mg/l | 2 years |
| Hexamethylene diisocyanate | Inhalation | nervous system | Not classified | Rat | NOAEL 0.002 mg/l | 7 weeks |
| Hexamethylene diisocyanate | Inhalation | heart | Not classified | Rat | NOAEL 0.001 mg/l | 90 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 waste product in a permitted industrial waste facility. As a disposal alternative, incinerate in a permitted waste incineration facility. Proper destruction may require the use of additional fuel during incineration processes. Empty drums/barrels/containers used for transporting and handling hazardous chemicals (chemical substances/mixtures/preparations classified as Hazardous as per applicable regulations) shall be considered, stored, treated & disposed of as hazardous wastes unless otherwise defined by applicable waste regulations. Consult with the respective regulating authorities to determine the available treatment and disposal facilities.

**EPA Hazardous Waste Number (RCRA):** Not regulated

## SECTION 14: Transport Information

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

## SECTION 15: Regulatory information

### 15.1. US Federal Regulations
Contact 3M for more information.

**EPCRA 311/312 Hazard Classifications:**

| **Physical Hazards** |
|---|
| Not Applicable. |

| **Health Hazards** |
|---|
| Acute toxicity |
| Respiratory or Skin Sensitization |
| Specific target organ toxicity (single or repeated exposure) |

### 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:** 3 **Flammability:** 1 **Instability:** 1 **Special Hazards:** Reacts with Water

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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|---|---|---|---|
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