



Safety Data Sheet

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Document Group:	07-9548-4	Version Number:	3.02
Issue Date:	01/23/26	Supersedes Date:	01/14/21

Product identifier

3M™ Quick Fix Adhesive PN 08224 (Kit)

ID Number(s):

60-9800-2981-7

7100006284

Recommended use

Automotive, Adhesive and Accelerator for Bonding Metal and Plastic on Vehicles

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:

07-7526-2, 07-9498-2

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Issue Date:	01/23/26	Supersedes Date:	07/30/18

SECTION 1: Identification

1.1. Product identifier

3M™ Quick Fix Adhesive PN 08224 (Adhesive)

Product Identification Numbers

LB-K100-0122-6

1.2. Recommended use and restrictions on use

Recommended use

Adhesive, Adhesive for Bonding Metal and Plastic on Vehicles

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

Flammable Liquid: Category 4.

Serious Eye Damage/Irritation: Category 2A.

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

2.2. Label elements

Signal word

Warning

Symbols

Exclamation mark |

Pictograms



Hazard Statements

Combustible Liquid

Causes serious eye irritation.
May cause respiratory irritation.

Precautionary statements

Prevention:

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.
Avoid breathing vapors.
Wash exposed skin thoroughly after handling.
Use only outdoors or in a well-ventilated area.
Wear protective gloves, eye protection, and face protection.

Response:

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 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.
In case of fire: Use a fire fighting agent suitable for flammable liquids such as dry chemical or carbon dioxide to extinguish.

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:

May bond tissue rapidly. Contact through clothing may cause thermal burns. Avoid eye and skin contact. If eyelids are bonded, do not force open. In case of skin bonding, quickly soak in warm water and avoid excessive force to free bonded area.

SECTION 3: Composition/information on ingredients

Ingredient	C.A.S. No.	% by Wt
Ethyl Cyanoacrylate	7085-85-0	80 - 100 Trade Secret *
Poly(Methyl Methacrylate)	9011-14-7	7 - 13

*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:

FOR SKIN BONDS: Quickly soak in warm water and avoid use of excessive force to free bonded area. If unable to free bonded area, or if lips or mouth are bonded, get medical attention. If irritation persists, get medical attention.

Eye Contact:

Immediately flush eyes with large amounts of water for at least 15 minutes. Get immediate medical attention. DO NOT force eyelids open.

If Swallowed:

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

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

Irritating to the respiratory tract (coughing, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain).

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 fire fighting agent suitable for flammable liquids such as dry chemical or carbon dioxide to extinguish.

5.2. Special hazards arising from the substance or mixture

Closed containers exposed to heat from fire may build pressure and explode.

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. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use only non-sparking tools. 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. 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.

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. Cover spill area with a fire-extinguishing foam. 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 using non-sparking tools. Place in a closed container approved for

transportation by appropriate authorities. Clean up residue with an appropriate solvent selected by a qualified and authorized person. Ventilate the area with fresh air. Read and follow safety precautions on the solvent label and SDS. Seal the container. Dispose of collected material as soon as possible in accordance with applicable local/regional/national/international regulations.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Avoid breathing dust/fume/gas/mist/vapors/spray. Do not get in eyes, on skin, or on clothing. Do not eat, drink or smoke when using this product. Wash thoroughly after handling. Avoid release to the environment. Avoid contact with oxidizing agents (eg. chlorine, chromic acid etc.)

7.2. Conditions for safe storage including any incompatibilities

Store in a well-ventilated place. Keep container tightly closed. Keep cool. Store away from acids. Store away from strong bases. Store away from oxidizing agents. 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
Ethyl Cyanoacrylate	7085-85-0	ACGIH	TWA:0.2 ppm;STEL:1 ppm	Dermal/Respiratory Sensitizer

ACGIH : American Conference of Governmental Industrial Hygienists

AIHA : American Industrial Hygiene Association

CMRG : Chemical Manufacturer's Recommended Guidelines

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

TWA: Time-Weighted-Average

STEL: Short Term Exposure Limit

CEIL: Ceiling

8.2. Exposure controls

8.2.1. Engineering controls

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

8.2.2. Personal protective equipment (PPE)

Eye/face protection

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

Safety Glasses with side shields

Indirect Vented Goggles

Skin/hand protection

Select and use gloves and/or protective clothing approved to relevant local standards to prevent skin contact based on the results of an exposure assessment. Selection should be based on use factors such as exposure levels, concentration of the substance or mixture, frequency and duration, physical challenges such as temperature extremes, and other use conditions. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible gloves/protective clothing. Do not wear cotton gloves.

Gloves made from the following material(s) are recommended: Chemical Protective glove of any material type

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

Physical state	Liquid
Color	Colorless
Odor	Moderate Acrylate
Odor threshold	No Data Available
pH	Not Applicable
Melting point/Freezing point	No Data Available
Boiling point/Initial boiling point/Boiling range	>=100 °C
Flash Point	>=80 °C [Test Method:Closed Cup]
Evaporation rate	No Data Available
Flammability	Flammable Liquid: Category 4.
Flammable Limits(LEL)	No Data Available
Flammable Limits(UEL)	No Data Available
Vapor Pressure	0.2 mmHg [Details:CONDITIONS: @ 75 F]
Relative Vapor Density	No Data Available
Density	1 - 1.2 g/ml
Relative Density	1 - 1.2 [Ref Std:WATER=1]
Water solubility	Nil [Details:Polymerized by Water]
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	583 mm ² /sec
Volatile Organic Compounds	1,092 g/l [Test Method:calculated SCAQMD rule 443.1]
Volatile Organic Compounds	91 % weight [Test Method:calculated per CARB title 2]
Percent volatile	91 % weight
VOC Less H ₂ O & Exempt Solvents	1,092 g/l [Test Method:calculated SCAQMD rule 443.1]

Particle Characteristics	Not Applicable
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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.

10.4. Conditions to avoid

Not determined

10.5. Incompatible materials

Strong bases

Amines

10.6. Hazardous decomposition products

<u>Substance</u>	<u>Condition</u>
Carbon monoxide	Not Specified
Carbon dioxide	Not Specified
Oxides of Nitrogen	Not Specified
Toxic Vapor, Gas, Particulate	Not Specified

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:

Bonds skin rapidly.

Mild Skin Irritation: Signs/symptoms may include localized redness, swelling, itching, and dryness. Contact through clothing may cause thermal burns.

Eye Contact:

Bonds eyelids rapidly.

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.

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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Overall product	Ingestion		No data available; calculated ATE >5,000 mg/kg
Ethyl Cyanoacrylate	Dermal	Rabbit	LD50 > 2,000 mg/kg
Ethyl Cyanoacrylate	Ingestion	Rat	LD50 > 5,000 mg/kg
Poly(Methyl Methacrylate)	Dermal		LD50 estimated to be > 5,000 mg/kg
Poly(Methyl Methacrylate)	Ingestion	Rat	LD50 > 5,000 mg/kg

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Ethyl Cyanoacrylate	Rabbit	Mild irritant
Poly(Methyl Methacrylate)	Rabbit	No significant irritation

Serious Eye Damage/Irritation

Name	Species	Value
Ethyl Cyanoacrylate	Rabbit	Severe irritant
Poly(Methyl Methacrylate)	Rabbit	Mild irritant

Skin Sensitization

Name	Species	Value
Ethyl Cyanoacrylate	Human	Not classified

Respiratory Sensitization

Name	Species	Value
Ethyl Cyanoacrylate	Human	Not classified

Germ Cell Mutagenicity

Name	Route	Value
Ethyl Cyanoacrylate	In Vitro	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

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

Target Organ(s)

Specific Target Organ Toxicity - single exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Ethyl Cyanoacrylate	Inhalation	respiratory irritation	May cause respiratory irritation	Human	NOAEL Not available	occupational exposure

Specific Target Organ Toxicity - repeated exposure

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

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.

Incinerate in a permitted waste incineration facility. Proper destruction may require the use of additional fuel during incineration processes. As a disposal alternative, utilize an acceptable permitted waste disposal facility. 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

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**

Flammable (gases, aerosols, liquids, or solids)

Health Hazards

Serious eye damage or eye irritation

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: 2 **Flammability:** 2 **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.

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Document Group:	07-9498-2	Version Number:	6.03
Issue Date:	01/23/26	Supersedes Date:	06/01/18

SECTION 1: Identification

1.1. Product identifier

3M™ Quick Fix Adhesive PN 08224 (Accelerator)

Product Identification Numbers

LB-K100-0118-7

1.2. Recommended use and restrictions on use

Recommended use

Automotive, Accelerator for Quick Fix Adhesive

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

Flammable Liquid: Category 2.

Carcinogenicity: Category 1B.

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

2.2. Label elements

Signal word

Danger

Symbols

Flame | Exclamation mark | Health Hazard |

Pictograms

**Hazard Statements**

Highly flammable liquid and vapor.

May cause cancer.

May cause drowsiness or dizziness.

Precautionary statements**Prevention:**

Obtain special instructions before use.

Do not handle until all safety precautions have been read and understood.

Keep away from heat, hot surfaces, sparks, open flames and other ignition sources. No smoking.

Keep container tightly closed.

Ground and bond container and receiving equipment.

Use explosion-proof electrical, ventilating and lighting equipment.

Use non-sparking tools.

Take action to prevent static discharges.

Avoid breathing vapor or spray.

Use only outdoors or in a well-ventilated area.

Wear protective gloves, eye protection, and face protection.

Response:

IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.

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

IF exposed or concerned: Call a POISON CENTER or doctor.

In case of fire: Use a fire fighting agent suitable for flammable liquids such as dry chemical or carbon dioxide to extinguish.

Storage:

Store in a well-ventilated place. Keep cool.

Store locked up.

Disposal:

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

SECTION 3: Composition/information on ingredients

Ingredient	C.A.S. No.	% by Wt
Hydrotreated Light Naphtha (Petroleum)	64742-49-0	60 - 80 Trade Secret *
Heptane	142-82-5	15 - 40 Trade Secret *
N,N-Dimethyl-P-Toluidine	99-97-8	0.1 - 1 Trade Secret *

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

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation:

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

Skin Contact:

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

Eye Contact:

If exposed, flush eyes with large amounts of water. Remove contact lenses if easy to do. Continue rinsing. If signs/symptoms develop, 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

Central nervous system depression (headache, dizziness, drowsiness, incoordination, nausea, slurred speech, giddiness, and unconsciousness).

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 flammable liquids such as dry chemical or carbon dioxide 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

Carbon monoxide
Carbon dioxide

Condition

During Combustion
During Combustion

5.3. Special protective actions for fire-fighters

Water may not effectively extinguish fire; however, it should be used to keep fire-exposed containers and surfaces cool and prevent explosive rupture. 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. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use only non-sparking tools. 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. 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.

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. Cover spill area with a fire-extinguishing foam. 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 using non-sparking tools. Place in a metal container approved for transportation by appropriate authorities. Clean up residue with an appropriate solvent selected by a qualified and authorized person. Ventilate the area with fresh air. Read and follow safety precautions on the solvent label and SDS. Seal the container. Dispose of collected material as soon as possible in accordance with applicable local/regional/national/international regulations.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Do not handle until all safety precautions have been read and understood. Keep away from heat/sparks/open flames/hot surfaces. - No smoking. Use only non-sparking tools. Take precautionary measures against static discharge. 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. Avoid release to the environment. Avoid contact with oxidizing agents (eg. chlorine, chromic acid etc.) Wear low static or properly grounded shoes. Use personal protective equipment (gloves, respirators, etc.) as required. To minimize the risk of ignition, determine applicable electrical classifications for the process using this product and select specific local exhaust ventilation equipment to avoid flammable vapor accumulation. Ground/bond container and receiving equipment if there is potential for static electricity accumulation during transfer.

7.2. Conditions for safe storage including any incompatibilities

Store in a well-ventilated place. Keep cool. Keep container tightly closed. 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	Additional Comments
Heptane	142-82-5	OSHA	TWA:2000 mg/m3(500 ppm)	
Heptane, straight and branched isomers	142-82-5	ACGIH	TWA:200 ppm;STEL:400 ppm	Ototoxicant
Hexane (Commercial, <54% n-Hexane)	64742-49-0	ACGIH	TWA:100 ppm	A3: Confirmed animal carcin., Danger of cutaneous absorption
NAPHTHA	64742-49-0	OSHA	TWA:400 mg/m3(100 ppm)	
N,N-Dimethyl-P-Toluidine	99-97-8	AIHA	TWA:0.5 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

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. Use explosion-proof ventilation equipment.

8.2.2. Personal protective equipment (PPE)

Eye/face protection

None required.

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.

There are no data to support a glove recommendation for prolonged or repeated contact. Any glove recommended for short-term or splash contact may be used for long-term tasks provided gloves are replaced frequently.

For short-term or splash contact, gloves made from the following material(s) are recommended (breakthrough times are ≤ 4 hours): Nitrile Rubber

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
Color	Colorless
Odor	Sharp Solvent
Odor threshold	<i>No Data Available</i>
pH	<i>Not Applicable</i>
Melting point/Freezing point	<i>No Data Available</i>
Boiling point/Initial boiling point/Boiling range	97.8 °C
Flash Point	-4 °C [<i>Test Method: Tagliabue Closed Cup</i>]
Evaporation rate	<i>No Data Available</i>
Flammability	Flammable Liquid: Category 2.
Flammable Limits(LEL)	1.1 %
Flammable Limits(UEL)	7 %
Vapor Pressure	40 mmHg [<i>Details: CONDITIONS: @ 68 F</i>]
Relative Vapor Density	Negligible
Density	0.684 g/ml
Relative Density	0.684 [<i>Ref Std: WATER=1</i>] [<i>Details: CONDITIONS: @ 77 F</i>]
Water solubility	Nil
Solubility- non-water	<i>No Data Available</i>
Partition coefficient: n-octanol/ water	<i>No Data Available</i>

Autoignition temperature	<i>No Data Available</i>
Decomposition temperature	<i>No Data Available</i>
Kinematic Viscosity	146 mm ² /sec
Volatile Organic Compounds	690 g/l [<i>Test Method</i> :calculated SCAQMD rule 443.1]
Volatile Organic Compounds	100 % weight [<i>Test Method</i> :calculated per CARB title 2]
Percent volatile	100 % volume
VOC Less H₂O & Exempt Solvents	690 g/l [<i>Test Method</i> :calculated SCAQMD rule 443.1]

Particle Characteristics	<i>Not Applicable</i>
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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

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.

May cause additional health effects (see below).

Skin Contact:

Mild Skin Irritation: Signs/symptoms may include localized redness, swelling, itching, and dryness.

Eye Contact:

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

Ingestion:

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

May cause additional health effects (see below).

Additional Health Effects:**Single exposure may cause target organ effects:**

Central Nervous System (CNS) Depression: Signs/symptoms may include headache, dizziness, drowsiness, incoordination, nausea, slowed reaction time, slurred speech, giddiness, and unconsciousness.

Carcinogenicity:

Contains a chemical or chemicals which can cause cancer.

<u>Inгредиент</u>	<u>CAS No.</u>	<u>Class Description</u>	<u>Regulation</u>
Dimethyl-p-toluidine	99-97-8	Grp. 2B: Possible human carc.	International Agency for Research on Cancer

Toxicological Data

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

Acute Toxicity

Name	Route	Species	Value
Overall product	Ingestion		No data available; calculated ATE >5,000 mg/kg
Hydrotreated Light Naphtha (Petroleum)	Dermal	Rabbit	LD50 > 2,920 mg/kg
Hydrotreated Light Naphtha (Petroleum)	Inhalation-Vapor (4 hours)	Rat	LC50 > 23.3 mg/l
Hydrotreated Light Naphtha (Petroleum)	Ingestion	Rat	LD50 > 5,820 mg/kg
Heptane	Dermal	similar compounds	LD50 > 2,000 mg/kg
Heptane	Inhalation-Vapor (4 hours)	similar compounds	LC50 > 33.5 mg/l
Heptane	Ingestion	similar compounds	LD50 > 5,000 mg/kg
N,N-Dimethyl-P-Toluidine	Ingestion	Mouse	LD50 140 mg/kg
N,N-Dimethyl-P-Toluidine	Dermal	Rabbit	LD50 > 2,000 mg/kg
N,N-Dimethyl-P-Toluidine	Inhalation-Dust/Mist (4 hours)	Rat	LC50 1.4 mg/l

ATE = acute toxicity estimate

Skin Corrosion/Irritation

Name	Species	Value
Hydrotreated Light Naphtha (Petroleum)	Rabbit	Minimal irritation
Heptane	Professional judgement	Mild irritant
N,N-Dimethyl-P-Toluidine	Rabbit	No significant irritation

Serious Eye Damage/Irritation

Name	Species	Value
Hydrotreated Light Naphtha (Petroleum)	Rabbit	Mild irritant
Heptane	similar compounds	Mild irritant
N,N-Dimethyl-P-Toluidine	Rabbit	No significant irritation

Skin Sensitization

Name	Species	Value
Hydrotreated Light Naphtha (Petroleum)	Guinea pig	Not classified
Heptane	similar compounds	Not classified
N,N-Dimethyl-P-Toluidine	Guinea pig	Sensitizing

Respiratory Sensitization

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

Germ Cell Mutagenicity

Name	Route	Value
Hydrotreated Light Naphtha (Petroleum)	In Vitro	Not mutagenic
Hydrotreated Light Naphtha (Petroleum)	In vivo	Not mutagenic
Heptane	In Vitro	Not mutagenic
N,N-Dimethyl-P-Toluidine	In vivo	Not mutagenic
N,N-Dimethyl-P-Toluidine	In Vitro	Some positive data exist, but the data are not sufficient for classification

Carcinogenicity

Name	Route	Species	Value
N,N-Dimethyl-P-Toluidine	Ingestion	Multiple animal species	Carcinogenic

Reproductive Toxicity**Reproductive and/or Developmental Effects**

Name	Route	Value	Species	Test Result	Exposure Duration
Hydrotreated Light Naphtha (Petroleum)	Not Specified	Not classified for female reproduction	Rat	NOAEL Not available	2 generation
Hydrotreated Light Naphtha (Petroleum)	Not Specified	Not classified for male reproduction	Rat	NOAEL Not available	2 generation
Hydrotreated Light Naphtha (Petroleum)	Not Specified	Not classified for development	Rat	NOAEL Not available	2 generation
N,N-Dimethyl-P-Toluidine	Ingestion	Not classified for female reproduction	Rat	NOAEL 60 mg/kg/day	90 days

Target Organ(s)**Specific Target Organ Toxicity - single exposure**

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Hydrotreated Light Naphtha (Petroleum)	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human and animal	NOAEL Not available	

Heptane	Inhalation	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	
Heptane	Inhalation	respiratory irritation	Some positive data exist, but the data are not sufficient for classification	similar health hazards	NOAEL Not available	
Heptane	Ingestion	central nervous system depression	May cause drowsiness or dizziness	Human	NOAEL Not available	

Specific Target Organ Toxicity - repeated exposure

Name	Route	Target Organ(s)	Value	Species	Test Result	Exposure Duration
Heptane	Inhalation	nervous system	Not classified	Rat	NOAEL 6.15 mg/l	30 weeks
Heptane	Inhalation	peripheral nervous system	Not classified	Rat	NOAEL 12.5 mg/l	16 weeks
Heptane	Inhalation	hematopoietic system	Not classified	Rat	NOAEL 12.2 mg/l	26 weeks
Heptane	Inhalation	kidney and/or bladder	Not classified	Rat	NOAEL 12.2 mg/l	26 weeks
N,N-Dimethyl-P-Toluidine	Ingestion	hematopoietic system	May cause damage to organs though prolonged or repeated exposure	Rat	NOAEL 20 mg/kg/day	3 months
N,N-Dimethyl-P-Toluidine	Ingestion	respiratory system	May cause damage to organs though prolonged or repeated exposure	Rat	NOAEL 20 mg/kg/day	2 years
N,N-Dimethyl-P-Toluidine	Ingestion	liver	Not classified	Rat	NOAEL 60 mg/kg/day	2 years
N,N-Dimethyl-P-Toluidine	Ingestion	immune system	Not classified	Rat	NOAEL 60 mg/kg/day	2 years
N,N-Dimethyl-P-Toluidine	Ingestion	kidney and/or bladder	Not classified	Rat	NOAEL 60 mg/kg/day	2 years
N,N-Dimethyl-P-Toluidine	Ingestion	heart	Not classified	Rat	NOAEL 60 mg/kg/day	2 years
N,N-Dimethyl-P-Toluidine	Ingestion	skin	Not classified	Rat	NOAEL 60 mg/kg/day	2 years
N,N-Dimethyl-P-Toluidine	Ingestion	endocrine system	Not classified	Rat	NOAEL 60 mg/kg/day	2 years
N,N-Dimethyl-P-Toluidine	Ingestion	gastrointestinal tract	Not classified	Rat	NOAEL 60 mg/kg/day	2 years
N,N-Dimethyl-P-Toluidine	Ingestion	bone, teeth, nails, and/or hair	Not classified	Rat	NOAEL 60 mg/kg/day	2 years
N,N-Dimethyl-P-Toluidine	Ingestion	muscles	Not classified	Rat	NOAEL 60 mg/kg/day	2 years
N,N-Dimethyl-P-Toluidine	Ingestion	nervous system	Not classified	Rat	NOAEL 60 mg/kg/day	2 years
N,N-Dimethyl-P-Toluidine	Ingestion	eyes	Not classified	Rat	NOAEL 60 mg/kg/day	2 years
N,N-Dimethyl-P-Toluidine	Ingestion	vascular system	Not classified	Rat	NOAEL 60 mg/kg/day	2 years

Aspiration Hazard

Name	Value
Hydrotreated Light Naphtha (Petroleum)	Aspiration hazard
Heptane	Aspiration hazard

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.

Incinerate in a permitted waste incineration facility. As a disposal alternative, utilize an acceptable permitted waste disposal facility. 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

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

Flammable (gases, aerosols, liquids, or solids)

Health Hazards

Carcinogenicity

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

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

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