Material Safety Data Sheet

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SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: 3M™ Black Primer (Step 2), PN 08684/30 mL; 08686/125 mL; 08692/5.91m L (US 60-

9800-2403-2; Europe 60-9800-3175-5/XS-0034-0429-9)

DISTRIBUTED BY: The Easthill Group

dba/ The Eastwood Company

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Document Group: 07-2551-5

Product Use:

Intended Use: Automotive

Specific Use: Urethane Windshield Primer

SECTION 2: INGREDIENTS

<u>Ingredient</u>	<u>C.A.S. No.</u>	% by Wt
METHYL ETHYL KETONE	78-93-3	30 - 60
N-BUTYL ACETATE	123-86-4	10 - 30
HEXAMETHYLENE DIISOCYANATE POLYMER	28182-81-2	10 - 20
CARBON BLACK	1333-86-4	3 - 7
POLYURETHANE PREPOLYMER	63368-95-6	3 - 7
POLYURETHANE RESINS	None	3 - 7
1-METHOXY-2-PROPYL ACETATE	108-65-6	1 - 5
HEXAMETHYLENE DIISOCYANATE	822-06-0	< 0.2
TOLUENE 2,4-DIISOCYANATE	584-84-9	0 - 0.1
TOLUENE 2,6-DIISOCYANATE	91-08-7	0 - 0.1

SECTION 3: HAZARDS IDENTIFICATION

3.1 EMERGENCY OVERVIEW

Odor, Color, Grade: Black liquid with solvent odor

General Physical Form: Liquid

Immediate health, physical, and environmental hazards: Extremely flammable liquid and vapor. Reacts violently with water. Closed containers exposed to heat from fire may build pressure and explode. Vapors may travel long distances along the ground or floor to an ignition source and flash back. May cause allergic skin reaction. May cause allergic respiratory reaction. May cause target organ effects. Contains a chemical or chemicals which can cause cancer.

3.2 POTENTIAL HEALTH EFFECTS

Eye Contact:

Moderate Eye Irritation: Signs/symptoms may include redness, swelling, pain, tearing, and blurred or hazy vision.

Skin Contact:

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

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

Inhalation:

Respiratory Tract Irritation: Signs/symptoms may include cough, sneezing, nasal discharge, headache, hoarseness, and nose and throat pain.

Allergic Respiratory Reaction: Signs/symptoms may include difficulty breathing, wheezing, cough, and tightness of chest.

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.

May be absorbed following inhalation and cause target organ effects.

Ingestion:

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

May be absorbed following ingestion and cause target organ effects.

Target Organ Effects:

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

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.

Ingredient	C.A.S. No.	Class Description	Regulation
CARBON BLACK	1333-86-4	Group 2B	International Agency for Research on Cancer
TOLUENE 2,4-DIISOCYANATE	584-84-9	Group 2B	International Agency for Research on Cancer
TOLUENE 2,4-DIISOCYANATE	584-84-9	Anticipated human carcinogen	National Toxicology Program Carcinogens
TOLUENE 2,6-DIISOCYANATE	91-08-7	Group 2B	International Agency for Research on Cancer
TOLUENE 2,6-DIISOCYANATE	91-08-7	Anticipated human carcinogen	National Toxicology Program Carcinogens

SECTION 4: FIRST AID MEASURES

4.1 FIRST AID PROCEDURES

The following first aid recommendations are based on an assumption that appropriate personal and industrial hygiene practices are followed.

Eye Contact: Flush eyes with large amounts of water. If signs/symptoms persist, get medical attention.

Skin Contact: Remove contaminated clothing and shoes. Immediately flush skin with large amounts of water. If signs/symptoms develop, get medical attention. Wash contaminated clothing and clean shoes before reuse.

Inhalation: Remove person to fresh air. If signs/symptoms develop, get medical attention.

If Swallowed: Do not induce vomiting unless instructed to do so by medical personnel. Give victim two glasses of water. Never give anything by mouth to an unconscious person. Get medical attention.

SECTION 5: FIRE FIGHTING MEASURES

5.1 FLAMMABLE PROPERTIES

Autoignition temperature No Data Available

Flash Point -7 °C [Test Method: Closed Cup]

Flammable Limits - LELNo Data Available **Flammable Limits - UEL**No Data Available

OSHA Flammability Classification: Class IB Flammable Liquid

5.2 EXTINGUISHING MEDIA

DO NOT USE WATER Use fire extinguishers with class B extinguishing agents (e.g., dry chemical, carbon dioxide).

5.3 PROTECTION OF FIRE FIGHTERS

Special Fire Fighting Procedures: Wear full protective equipment (Bunker Gear) and a self-contained breathing apparatus (SCBA). Water may not effectively extinguish fire; however, it should be used to keep fire-exposed containers and surfaces cool and prevent explosive rupture.

Unusual Fire and Explosion Hazards: Flammable liquid and vapor. Closed containers exposed to heat from fire may build pressure and explode. Vapors may travel long distances along the ground or floor to an ignition source and flash back.

Note: See STABILITY AND REACTIVITY (SECTION 10) for hazardous combustion and thermal decomposition information.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Accidental Release Measures: Refer to other sections of this MSDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment. Call 3M-HELPS line (1-800-364-3577) for more information on handling and managing the spill. Evacuate unprotected and untrained personnel from hazard area. The spill should be cleaned up by qualified personnel. Remove all ignition sources such as flames, smoking materials, and electrical spark sources. Use only nonsparking 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. Contain spill. For larger spills, cover drains and build dikes to prevent entry into sewer systems or bodies of water. Avoid contact with incompatible materials listed in the Reactivity Data Section. 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. 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 toxic, corrosivity or flammability hazard. Collect as much of the spilled material as possible using non-sparking tools. 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 MSDS. Collect the resulting residue containing solution. Place in a metal container approved for transportation by appropriate authorities. Seal the container. Dispose of collected material as soon as possible.

In the event of a release of this material, the user should determine if the release qualifies as reportable according to local, state, and federal regulations.

SECTION 7: HANDLING AND STORAGE

7.1 HANDLING

Avoid contact with water to prevent potentially violent reaction or fire. Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water. Keep away from heat, sparks, open flame, pilot lights and other sources of ignition. Ground containers securely when transferring contents. Wear low static or properly grounded shoes. No smoking while handling this material. Avoid breathing of vapors, mists or spray. Avoid static discharge. Avoid eye contact with vapors, mists, or spray. For industrial or professional use only. Do not breathe vapors. Avoid contact with oxidizing agents.

7.2 STORAGE

Store away from acids. Store away from heat. Store out of direct sunlight. Keep container in well-ventilated area. Keep container tightly closed. Store away from oxidizing agents.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 ENGINEERING CONTROLS

Provide appropriate local exhaust ventilation on open containers. Do not use in a confined area or areas with little or no air movement. Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below Occupational Exposure Limits and/or control mist, vapor, or spray. If ventilation is not adequate, use respiratory protection equipment.

8.2 PERSONAL PROTECTIVE EQUIPMENT (PPE)

8.2.1 Eye/Face Protection

Avoid eye contact with vapors, mists, or spray.

The following eye protection(s) are recommended: Safety Glasses with side shields, Indirect Vented Goggles.

8.2.2 Skin Protection

Avoid skin contact.

Select and use gloves and/or protective clothing to prevent skin contact based on the results of an exposure assessment. Consult with your glove and/or protective clothing manufacturer for selection of appropriate compatible materials.

Gloves made from the following material(s) are recommended: Polyvinyl Alcohol (PVA), Polyethylene/Ethylene Vinyl Alcohol.

8.2.3 Respiratory Protection

Avoid breathing of vapors, mists or spray.

Select one of the following NIOSH approved respirators based on airborne concentration of contaminants and in accordance with OSHA regulations: Fullface air-purifying respirator with organic vapor cartridges and N95 particulate prefilters. Consult the current 3M Respiratory Selection Guide for additional information or call 1-800-243-4630 for 3M technical assistance.

8.2.4 Prevention of Swallowing

Do not eat, drink or smoke when using this product. Wash exposed areas thoroughly with soap and water. Not applicable.

8.3 EXPOSURE GUIDELINES

Ingredient	Authority	Type	<u>Limit</u>	Additional Information
1-METHOXY-2-PROPYL ACETATE	AIHA	TWA	50 ppm	
1-METHOXY-2-PROPYL ACETATE	CMRG	TWA	10 mg/m3	
1-METHOXY-2-PROPYL ACETATE	CMRG	STEL	90 ppm	
CARBON BLACK	ACGIH	TWA	3.5 mg/m3	Table A4
CARBON BLACK	CMRG	TWA	0.5 mg/m3	
CARBON BLACK	OSHA	TWA	3.5 mg/m3	Table Z-1
HEXAMETHYLENE DIISOCYANATE	ACGIH	TWA	0.005 ppm	
HEXAMETHYLENE DIISOCYANATE	CMRG	CEIL	0.02 ppm	
HEXAMETHYLENE DIISOCYANATE	CMRG	TWA	0.5 mg/m3	
POLYMER				
HEXAMETHYLENE DIISOCYANATE	CMRG	STEL	1 mg/m3	
POLYMER				
METHYL ETHYL KETONE	ACGIH	TWA	200 ppm	
METHYL ETHYL KETONE	ACGIH	STEL	300 ppm	
METHYL ETHYL KETONE	OSHA	TWA	200 ppm	Table Z-1A
METHYL ETHYL KETONE	OSHA	STEL	300 ppm	Table Z-1A
N-BUTYL ACETATE	ACGIH	TWA	150 ppm	
N-BUTYL ACETATE	ACGIH	STEL	200 ppm	
N-BUTYL ACETATE	OSHA	TWA	150 ppm	Table Z-1A
N-BUTYL ACETATE	OSHA	STEL	200 ppm	Table Z-1A
TOLUENE 2,4-DIISOCYANATE	ACGIH	TWA	0.005 ppm	Sensitizer; Table A4
TOLUENE 2,4-DIISOCYANATE	ACGIH	STEL	0.02 ppm	Sensitizer; Table A4
TOLUENE 2,4-DIISOCYANATE	OSHA	TWA, Vacated	0.005 ppm	
TOLUENE 2,4-DIISOCYANATE	OSHA	CEIL	0.02 ppm	Table Z-1
TOLUENE 2,4-DIISOCYANATE	OSHA	STEL, Vacated	0.02 ppm	
TOLUENE 2,6-DIISOCYANATE	ACGIH	TWA	0.005 ppm	Sensitizer; Table A4
TOLUENE 2,6-DIISOCYANATE	ACGIH	STEL	0.02 ppm	Sensitizer; Table A4

VAC Vacated PEL:Vacated Permissible Exposure Limits [PEL] are enforced as the OSHA PEL in some states. Check with your local regulatory agency.

SOURCE OF EXPOSURE LIMIT DATA:

ACGIH: American Conference of Governmental Industrial Hygienists

CMRG: Chemical Manufacturer Recommended Guideline

OSHA: Occupational Safety and Health Administration

AIHA: American Industrial Hygiene Association Workplace Environmental Exposure Level (WEEL)

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Odor, Color, Grade: Black liquid with solvent odor

General Physical Form: Liquid

Autoignition temperature No Data Available

Flash Point -7 °C [Test Method: Closed Cup]

Flammable Limits - LEL No Data Available
Flammable Limits - UEL No Data Available

Boiling point 80 °C

Vapor Density No Data Available

Vapor Pressure 71 mmHg [@ 20 °C]

Specific Gravity 1.0 [Ref Std: WATER=1]

pH Not Applicable
Melting point Not Applicable

Solubility in Water Nil

Evaporation rate No Data Available

Volatile Organic Compounds 699 g/l [Test Method: calculated SCAQMD rule 443.1]

Percent volatile Approximately 70 %

VOC Less H2O & Exempt Solvents 699 g/l [Test Method: calculated SCAQMD rule 443.1]

Viscosity No Data Available

SECTION 10: STABILITY AND REACTIVITY

Stability: Stable.

Materials and Conditions to Avoid: Heat; Sparks and/or flames

Hazardous Polymerization: Hazardous polymerization will not occur.

Hazardous Decomposition or By-Products

<u>Substance</u> <u>Condition</u>

Carbon monoxideDuring CombustionCarbon dioxideDuring CombustionOxides of NitrogenDuring Combustion

SECTION 11: TOXICOLOGICAL INFORMATION

Please contact the address listed on the first page of the MSDS for Toxicological Information on this material and/or its components.

SECTION 12: ECOLOGICAL INFORMATION

ECOTOXICOLOGICAL INFORMATION

Not determined.

CHEMICAL FATE INFORMATION

Not determined.

SECTION 13: DISPOSAL CONSIDERATIONS

Waste Disposal Method: Incinerate in a permitted hazardous waste incinerator. As a disposal alternative, dispose of waste product in a permitted hazardous waste facility.

EPA Hazardous Waste Number (RCRA): D001 (Ignitable), D035 (Methyl ethyl ketone)

Since regulations vary, consult applicable regulations or authorities before disposal.

SECTION 14:TRANSPORT INFORMATION

ID Number(s):

60-9800-2537-7, 60-9800-2539-3

Please contact the emergency numbers listed on the first page of the MSDS for Transportation Information for this material.

SECTION 15: REGULATORY INFORMATION

US FEDERAL REGULATIONS

Contact 3M for more information.

311/312 Hazard Categories:

Fire Hazard - Yes 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):

<u>Ingredient</u>	C.A.S. No	<u>% by Wt</u>
METHYL ETHYL KETONE	78-93-3	30 - 60
TOLUENE 2,4-DIISOCYANATE	584-84-9	0 - 0.1
TOLUENE 2,6-DIISOCYANATE	91-08-7	0 - 0.1

STATE REGULATIONS

Contact 3M for more information.

CALIFORNIA PROPOSITION 65

IngredientC.A.S. No.ClassificationTOLUENE 2,6-DIISOCYANATE91-08-7**Carcinogen

CHEMICAL INVENTORIES

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

All applicable chemical ingredients in this material are listed on the European Inventory of Existing Chemical Substances (EINECS), or are exempt polymers whose monomers are listed on EINECS.

The components of this product are listed on the Canadian Domestic Substances List.

The components of this product are listed on the Australian Inventory of Chemical Substances.

The components of this material are in compliance with the new chemical notification requirements for the Korean Existing Chemicals Inventory.

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

All the components of this product are listed on China's Inventory of Chemical Substances.

Contact 3M for more information.

INTERNATIONAL REGULATIONS

Contact 3M for more information.

This MSDS 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: 3 Reactivity: 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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^{**} WARNING: contains a chemical which can cause cancer.

Revision Changes:

Section 1: Product name was modified.

Section 1: Product use information was modified.

Copyright was modified.

Section 4: First aid for eye contact - decontamination - was modified.

Section 4: First aid for eye contact - medical assistance - was modified.

Section 3: Potential effects from eye contact was modified.

Section 3: Potential effects from skin contact information was modified.

Section 3: Potential effects from inhalation information was modified.

Section 3: Potential effects from ingestion information was modified.

Section 8: Eye/face protection phrase was modified.

Section 8: Prevention of swallowing information was modified.

Section 4: First aid for ingestion (swallowing) - decontamination - was modified.

Section 3: Immediate other hazard(s) was modified.

Section 3: Other health effects information was modified.

Page Heading: Product name was modified.

Section 14: ID Number Heading Template 1 was added.

Section 14: ID Number(s) Template 1 was added.

Section 2: Ingredient table was added.

Section 15: EPCRA 313 information was added.

Section 15: EPCRA 313 text was added.

Section 8: Exposure guidelines ingredient information was added.

Section 8: Exposure guidelines legend was added.

Section 8: Exposure guidelines data source legend was added.

Section 3: Carcinogenicity table was added.

Section 3: Carcinogenicity heading was added.

Section 15: California proposition 65 ingredient information was added.

Section 15: California proposition 65 heading was added.

Section 15: California proposition 65 cancer warning was added.

Section 3: Immediate eye hazard(s) was deleted.

Section 3: Immediate other hazard(s) comment was deleted.

Section 16: Reason for reissue heading was deleted.

Section 16: Reason for reissue phrase was deleted.

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