



**3M General Offices**  
3M Center  
St. Paul, MN 55144-1000  
1-800-364-3577 or (651) 737-6501 (24 hours)

8/28/2009 7:34:21 AM

## Material Safety Data Sheet

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Purchase Order #: -  
Customer Number: MLP6406

PRIV LBL  
KLINGSPOR ABRASIVES INC  
2555 TATE BLVD SE  
HICKORY, NC 28602-1445  
United States of America

Dear PRIV LBL

Enclosed is the Material Safety Data Sheet (MSDS) for the product that your company recently purchased from 3M.

The MSDS being sent to you is required by the Supplier Notification Requirement of 40 CFR 372.45 (c 4), a part of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372. The Supplier Notification Requirement requires the supplier to provide new notification to the recipient when the supplier changes an MSDS in any of the following ways related to EPCRA Section 313 chemical(s):

- Additional EPCRA Section 313 chemical(s) were added to the MSDS,
- The percent weight of any EPCRA Section 313 chemical(s) changed, or
- EPCRA 313 chemical(s) were deleted from the MSDS.

Please forward the attached MSDS to the individual in your organization responsible for implementing Title III of the Superfund Amendments and Reorganization Act of 1986 and 40 CFR Part 372 regulations.

This letter and accompanying MSDS were created using a 3M computerized system. This system automatically prints and sends an MSDS when a product is first ordered by a customer, when the MSDS has been changed at the time of a subsequent order by the customer, or if renotification is warranted by Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372 regulations.

3M MSDSs are available over the Internet at [www.3m.com/MSDSSearch](http://www.3m.com/MSDSSearch). You may also order a CD-ROM of 3M MSDSs by calling 1-800-364-3577.

3M is committed to meeting our customer requirements, and we ask that you contact your 3M customer service or sales representative if you have any questions. If you do not know whom to contact, please call the 3M Product Information Center at 1-800-364-3577.

**If you are not currently receiving 3M MSDSs by e-mail and would like to do so, please contact our eMSDS Administrator at [emsdsadmin@mmm.com](mailto:emsdsadmin@mmm.com) or by calling 651-736-5875.**





## Material Safety Data Sheet

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### SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** Mar-Hyde(r) Tal-Strip(r) IV Urethane Parts Paint Remover, 5611

**MANUFACTURER:** 3M

**DIVISION:** Automotive Aftermarket

**ADDRESS:** 3M Center  
St. Paul, MN 55144-1000

**EMERGENCY PHONE:** 1-800-364-3577 or (651) 737-6501 (24 hours)

**Issue Date:** 08/27/09

**Supersedes Date:** 09/02/08

**Document Group:** 24-8605-8

**Product Use:**

Intended Use: Automotive

### SECTION 2: INGREDIENTS

<u>Ingredient</u>	<u>C.A.S. No.</u>	<u>% by Wt</u>
METHYLENE CHLORIDE	75-09-2	60 - 100
PROPANE	74-98-6	5 - 10
BUTANE	106-97-8	5 - 10
TOLUENE	108-88-3	3 - 7
METHYL ALCOHOL	67-56-1	1 - 5
ETHYL ALCOHOL	64-17-5	1 - 5
WATER	7732-18-5	1 - 5
BUTYL ALCOHOL	71-36-3	1 - 5
CLAY-TREATED PARAFFIN WAXES	64742-43-4	0.5 - 1.5
HYDROXYPROPYL METHYL CELLULOSE	9004-65-3	0.5 - 1.5
STODDARD SOLVENT	8052-41-3	0.5 - 1.5
PROPYLENE OXIDE	75-56-9	< 0.05

### SECTION 3: HAZARDS IDENTIFICATION

#### 3.1 EMERGENCY OVERVIEW

**Specific Physical Form:** Aerosol

**Odor, Color, Grade:** Solvent odor/ clear

**General Physical Form:** Liquid

**Immediate health, physical, and environmental hazards:** Flammable liquid and vapor. Aerosol container contains flammable gas under pressure. Closed containers exposed to heat from fire may build pressure and explode. Extremely flammable liquid and vapor. Vapors may travel long distances along the ground or floor to an ignition source and flash back. Aerosol container contains flammable material under pressure. May cause target organ effects. May cause genotoxic or mutagenic effects. Contains a chemical or chemicals which can cause birth defects or other reproductive harm. 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:**

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

**Inhalation:**

Intentional concentration and inhalation may be harmful or fatal.

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

Single exposure, above recommended guidelines, may cause:

Cardiac Sensitization: Signs/symptoms may include irregular heartbeat (arrhythmia), faintness, chest pain, and may be fatal.

Prolonged or repeated exposure may cause:

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:**

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

May cause blindness.

Blood Effects: Signs/symptoms may include generalized weakness and fatigue, skin pallor, changes in blood clotting time, internal bleeding, and/or hemoglobinemia.

Prolonged or repeated exposure may cause:

Neurological Effects: Signs/symptoms may include personality changes, lack of coordination, sensory loss, tingling or numbness of the extremities, weakness, tremors, and/or changes in blood pressure and heart rate.

Ocular Effects: Signs/symptoms may include blurred or significantly impaired vision.

Kidney/Bladder Effects: Signs/symptoms may include changes in urine production, abdominal or lower back pain, increased protein in urine, increased blood urea nitrogen (BUN), blood in urine, and painful urination.

Liver Effects: Signs/symptoms may include loss of appetite, weight loss, fatigue, weakness, abdominal tenderness and jaundice.

Auditory Effects: Signs/symptoms may include hearing impairment, balance dysfunction and ringing in the ears.

Olfactory Effects: Signs/symptoms may include decreased ability to detect odors and/or complete loss of smell.

Genotoxicity and Mutagenicity: May interact with genetic material and possibly alter gene expression.

Contains a chemical or chemicals which can cause birth defects or other reproductive harm.

**Carcinogenicity:**

Contains a chemical or chemicals which can cause cancer.

NOTE: This product contains ethanol. In IARC published Monograph No. 44, entitled, "Alcohol Drinking", the carcinogenicity of ethanol was determined based on chronic exposure to ethanol through human consumption of alcoholic beverages. This is not an expected effect during the foreseeable use of this product.

<u>Ingredient</u>	<u>C.A.S. No.</u>	<u>Class Description</u>	<u>Regulation</u>
ETHYL ALCOHOL	64-17-5	Group 1	International Agency for Research on Cancer
METHYLENE CHLORIDE	75-09-2	Group 2B	International Agency for Research on Cancer
METHYLENE CHLORIDE	75-09-2	Anticipated human carcinogen	National Toxicology Program Carcinogens
METHYLENE CHLORIDE	75-09-2	Cancer hazard	OSHA Carcinogens
PROPYLENE OXIDE	75-56-9	Group 2B	International Agency for Research on Cancer
PROPYLENE OXIDE	75-56-9	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. Get medical attention. Wash contaminated clothing and clean shoes before reuse.

**Inhalation:** Remove person to fresh air. Get immediate 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.

## 4.2 NOTE TO PHYSICIANS

Exposure may increase myocardial irritability. Do not administer sympathomimetic drugs unless absolutely necessary.

## SECTION 5: FIRE FIGHTING MEASURES

### 5.1 FLAMMABLE PROPERTIES

Autoignition temperature	No Data Available
Flash Point	-156 °F [Test Method: Closed Cup]
Flammable Limits - LEL	1.9
Flammable Limits - UEL	No Data Available

### 5.2 EXTINGUISHING MEDIA

Use fire extinguishers with class B extinguishing agents (e.g., dry chemical, carbon dioxide).

### 5.3 PROTECTION OF FIRE FIGHTERS

**Special Fire Fighting Procedures:** 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 equipment (Bunker Gear) and a self-contained breathing apparatus (SCBA).

**Unusual Fire and Explosion Hazards:** Closed containers exposed to heat from fire may build pressure and explode. Extremely flammable liquid and vapor. Vapors may travel long distances along the ground or floor to an ignition source and flash back. Aerosol container contains flammable material under pressure.

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

## SECTION 6: ACCIDENTAL RELEASE MEASURES

**Accidental Release Measures:** If possible, seal leaking container. Place leaking containers in a well-ventilated area, preferably an operating exhaust hood, or if necessary outdoors on an impermeable surface until appropriate packaging for the leaking container or its contents is available.

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 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. Contain spill. For larger spills, cover drains and build dikes to prevent entry into sewer systems or bodies of water. Cover spill area with a fire-extinguishing foam designed for use on solvents, such as alcohols and acetone, that can dissolve in water. An AR - AFFF type foam is recommended. 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 detergent and water. 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

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. Do not pierce or burn container, even after use. No smoking while handling this material. Do not spray near flames or sources of ignition. Avoid breathing of vapors, mists or spray. Avoid skin contact. Aerosol container contains flammable gas under pressure. Avoid static discharge. Avoid eye contact with vapors, mists, or spray. Keep out of the reach of children. Avoid contact with oxidizing agents. Use general dilution ventilation and/or local exhaust ventilation to control airborne exposures to below Occupational Exposure Limits. If ventilation is not adequate, use respiratory protection equipment.

### 7.2 STORAGE

Store away from acids. Store away from heat. Store out of direct sunlight. Keep container tightly closed. Do not store containers on their sides. Store away from oxidizing agents.

## SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

### 8.1 ENGINEERING CONTROLS

Use in an enclosed process area is recommended. If exhaust ventilation is not available, use appropriate respiratory protection. Do not use in a confined area or areas with little or no air movement. Local exhaust ventilation with a minimum capture velocity of 100 linear feet per minute should be provided for applications at or above the boiling temperature. 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: Full Face Shield, 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: Butyl Rubber, Polyvinyl Alcohol (PVA).

#### 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: Half facepiece or fullface pressure demand self-contained breathing apparatus. 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.

**8.3 EXPOSURE GUIDELINES**

<u>Ingredient</u>	<u>Authority</u>	<u>Type</u>	<u>Limit</u>	<u>Additional Information</u>
BUTANE	ACGIH	TWA	1000 ppm	
BUTANE	OSHA	TWA	800 ppm	Table Z-1A
BUTYL ALCOHOL	ACGIH	TWA	20 ppm	
BUTYL ALCOHOL	OSHA	CEIL, Vacated	50 ppm	Skin Notation*
BUTYL ALCOHOL	OSHA	TWA	100 ppm	Table Z-1
ETHYL ALCOHOL	ACGIH	TWA	1000 ppm	Table A4
ETHYL ALCOHOL	OSHA	TWA	1000 ppm	Table Z-1
METHYL ALCOHOL	ACGIH	TWA	200 ppm	Skin Notation*
METHYL ALCOHOL	ACGIH	STEL	250 ppm	Skin Notation*
METHYL ALCOHOL	OSHA	TWA	200 ppm	Skin Notation*; Table Z-1A
METHYL ALCOHOL	OSHA	STEL	250 ppm	Skin Notation*; Table Z-1A
METHYLENE CHLORIDE	ACGIH	TWA	50 ppm	Table A3
METHYLENE CHLORIDE	OSHA	TWA	25 ppm	
METHYLENE CHLORIDE	OSHA	STEL	125 ppm	
PROPANE	ACGIH	TWA	1000 ppm	
PROPANE	OSHA	TWA	1000 ppm	Table Z-1
PROPYLENE OXIDE	ACGIH	TWA	20 ppm	Sensitizer; Table A3
PROPYLENE OXIDE	CMRG	TWA	10 ppm	
PROPYLENE OXIDE	OSHA	TWA, Vacated	20 ppm	
PROPYLENE OXIDE	OSHA	TWA	100 ppm	Table Z-1
STODDARD SOLVENT	ACGIH	TWA	100 ppm	
STODDARD SOLVENT	OSHA	TWA, Vacated	100 ppm	Table Z-1A
STODDARD SOLVENT	OSHA	TWA	500 ppm	Table Z-1
TOLUENE	ACGIH	TWA	20 ppm	Table A4
TOLUENE	CMRG	STEL	75 ppm	Skin Notation*
TOLUENE	OSHA	TWA, Vacated	100 ppm	
TOLUENE	OSHA	STEL, Vacated	150 ppm	
TOLUENE	OSHA	TWA	200 ppm	Table Z-2
TOLUENE	OSHA	CEIL	300 ppm	Table Z-2

\* Substance(s) refer to the potential contribution to the overall exposure by the cutaneous route including mucous membrane and eye, either by airborne or, more particularly, by direct contact with the substance. Vehicles can alter skin absorption.

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**

<b>Specific Physical Form:</b>	Aerosol
<b>Odor, Color, Grade:</b>	Solvent odor/ clear
<b>General Physical Form:</b>	Liquid
<b>Autoignition temperature</b>	<i>No Data Available</i>
<b>Flash Point</b>	-156 °F [ <i>Test Method:</i> Closed Cup]
<b>Flammable Limits - LEL</b>	1.9
<b>Flammable Limits - UEL</b>	<i>No Data Available</i>
<b>Boiling point</b>	-12 °C



Density	8.286 lb/gal
Vapor Density	4.9000
Vapor Pressure	No Data Available
Specific Gravity	1.237
pH	No Data Available
Melting point	Not Applicable
Solubility in Water	Moderate
Volatile Organic Compounds	313.47 g/l [Test Method: calculated SCAQMD rule 443.1]
Percent volatile	80.96 % weight
VOC Less H2O & Exempt Solvents	676.29 g/l [Test Method: calculated SCAQMD rule 443.1]

## SECTION 10: STABILITY AND REACTIVITY

**Stability:** Stable.

**Materials and Conditions to Avoid:** Sparks and/or flames; Heat; Strong bases; Strong oxidizing agents

**Hazardous Polymerization:** Hazardous polymerization will not occur.

### Hazardous Decomposition or By-Products

<u>Substance</u>	<u>Condition</u>
Carbon monoxide	Not Specified
Carbon dioxide	Not Specified
Ammonia	Not Specified

## 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:** Dispose of waste product in a permitted hazardous waste facility.

Facility must be capable of handling aerosol cans. Dispose of empty product containers in a sanitary landfill.

**EPA Hazardous Waste Number (RCRA):** D001 (Ignitable)

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

**SECTION 14: TRANSPORT INFORMATION**

**ID Number(s):**  
LB-K100-0544-3, 70-0080-0426-2

**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 - Yes    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>	<u>C.A.S. No</u>	<u>% by Wt</u>
METHYLENE CHLORIDE	75-09-2	60 - 100
TOLUENE	108-88-3	3 - 7
METHYL ALCOHOL	67-56-1	1 - 5
BUTYL ALCOHOL	71-36-3	1 - 5

**STATE REGULATIONS**

Contact 3M for more information.

**CALIFORNIA PROPOSITION 65**

<u>Ingredient</u>	<u>C.A.S. No.</u>	<u>Classification</u>
METHYLENE CHLORIDE	75-09-2	**Carcinogen
PROPYLENE OXIDE	75-56-9	**Carcinogen
TOLUENE	108-88-3	*Developmental Toxin

\* WARNING: contains a chemical or chemicals which can cause birth defects or other reproductive harm.

\*\* WARNING: contains a chemical which can cause cancer.

## CHEMICAL INVENTORIES

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: 4 Reactivity: 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.

### Revision Changes:

Section 16: NFPA hazard classification for health 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 6: Release measures information was modified.  
Section 13: Waste disposal method information was modified.  
Section 3: Carcinogenicity phrase was modified.  
Section 3: Immediate other hazard(s) was modified.  
Section 3: Other health effects information was modified.  
Section 9: Property description for optional properties was modified.  
Section 1: Initial issue message was modified.  
Section 2: Ingredient table was modified.  
Section 15: EPCRA 313 information was modified.  
Section 8: Exposure guidelines ingredient information was modified.  
Section 3: Carcinogenicity table was modified.  
Section 15: California proposition 65 ingredient information was modified.  
Section 3: Other health effects information (mutagenicity) was added.  
Section 4: Conditions aggravated by exposure heading was deleted.  
Section 3: Immediate skin hazard(s) was deleted.  
Section 3: Immediate eye hazard(s) was deleted.  
Section 4: Conditions aggravated by exposure information was deleted.

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