

MATERIAL SAFETY 3M
 DATA SHEET 3M Center
 St. Paul, Minnesota
 55144-1000
 1-800-364-3577 or (651) 737-6501 (24 hours)

Copyright, 2000, Minnesota Mining and Manufacturing Company.
 All rights reserved. Copying and/or downloading of this
 information for the purpose of properly utilizing 3M products
 is allowed provided that:
 1) the information is copied in full with no changes unless
 prior agreement is obtained from 3M, and
 2) neither the copy nor the original is resold or otherwise
 distributed with the intention of earning a profit thereon.

DIVISION: AUTOMOTIVE AFTERMARKET
 TRADE NAME:
 3M(TM) Undercoating, P.N. 08881
 ID NUMBER/U.P.C.:
 60-9800-1957-8 00-51135-08881-4
 ISSUED: October 17, 2000
 SUPERSEDES: September 28, 2000
 DOCUMENT: 05-9962-1

1. INGREDIENT	C.A.S. NO.	PERCENT	
LIMESTONE.....	1317-65-3	10.0	- 30.0
TOLUENE.....	108-88-3	10.0	- 30.0
SOLVENT NAPHTHA (PETROLEUM), LIGHT ALIPHATIC.....	64742-89-8	10.0	- 30.0
ASPHALT.....	8052-42-4	7.0	- 13.0
PROPANE.....	74-98-6	7.0	- 13.0
BUTANE.....	106-97-8	7.0	- 13.0
KAOLIN.....	1332-58-7	3.0	- 7.0
MAGNESIUM ALUMINUM SILICATE.....	12174-11-7	3.0	- 7.0
OLEYL IMIDAZOLINE.....	27136-73-8	1.0	- 5.0
QUARTZ SILICA.....	14808-60-7	0.5	- 1.5

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.

This product contains the following toxic chemical or chemicals subject to the reporting requirements of Section 313 of Title III of the Emergency Planning and Community Right-To-Know Act of 1986 and 40 CFR Part 372:
 TOLUENE

Abbreviations: N/D - Not Determined N/A - Not Applicable CA - Approximately

2. PHYSICAL DATA

BOILING POINT:..... Compressed Gas
VAPOR PRESSURE:..... Compressed Gas
VAPOR DENSITY:..... > 1.00 Air=1
EVAPORATION RATE:..... N/D
SOLUBILITY IN WATER:..... Nil
SPECIFIC GRAVITY:..... 0.95 Water=1
PERCENT VOLATILE:..... ca. 52.00 % by wt
pH:..... N/A
VISCOSITY:..... N/A
MELTING POINT:..... N/D

APPEARANCE AND ODOR:

Liquid in aerosol container, black, solvent odor

3. FIRE AND EXPLOSION HAZARD DATA

FLASH POINT:..... -50.00 F
FLAMMABLE LIMITS - LEL:..... N/D
FLAMMABLE LIMITS - UEL:..... N/D
AUTOIGNITION TEMPERATURE:..... N/D

EXTINGUISHING MEDIA:

Carbon dioxide, Dry chemical, Foam

SPECIAL FIRE FIGHTING PROCEDURES:

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.

UNUSUAL FIRE AND EXPLOSION HAZARDS:

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.

NFPA HAZARD CODES: HEALTH: 2 FIRE: 4 REACTIVITY: 0
UNUSUAL REACTION HAZARD: none

4. REACTIVITY DATA

STABILITY: Stable

Abbreviations: N/D - Not Determined N/A - Not Applicable CA - Approximately

4. REACTIVITY DATA (continued)

INCOMPATIBILITY - MATERIALS/CONDITIONS TO AVOID:
Heat.

HAZARDOUS POLYMERIZATION: Hazardous polymerization will not occur.

HAZARDOUS DECOMPOSITION PRODUCTS:
Carbon Monoxide and Carbon Dioxide, Phosgene, Chlorine, Toxic Vapors,
Gases or Particulates.

5. ENVIRONMENTAL INFORMATION

SPILL RESPONSE:

Refer to other sections of this MSDS for information regarding physical and health hazards, respiratory protection, ventilation, and personal protective equipment. Ventilate area. Extinguish all ignition sources. Contain spill. Evacuate unprotected personnel from hazard area. Cover with absorbent material. Cover spill area with Light Water Brand or other AFFF foam. (For further information on AFFF foam usage, contact 3M Fire Protection Systems.) Collect using non-sparking tools. Clean up residue. Place in an approved metal container. Seal the container. Place leaking containers in a well-ventilated area, preferably in an exhaust hood, if available, or outdoors.

RECOMMENDED DISPOSAL:

Incinerate in a permitted hazardous waste incinerator. Do not puncture or burn cans in a household incinerator. Facility must be capable of handling aerosol cans. Disposal alternative: Dispose of empty cans in a sanitary landfill.

ENVIRONMENTAL DATA:

Not determined.

REGULATORY INFORMATION:

Volatile Organic Compounds: 494.00 gms/liter South Coast Air Quality Mgmt Dist Method Rule 443.1, calculated.
VOC Less H2O & Exempt Solvents: 494.00 gms/liter South Coast Air Quality Mgmt Dist Method Rule 443.1, calculated.

Since regulations vary, consult applicable regulations or authorities before disposal. In the event of an uncontrolled release of this material, the user should determine if the release qualifies as a reportable quantity. U.S. EPA Hazardous Waste Number = D001 (Ignitable)

EPCRA HAZARD CLASS:

FIRE HAZARD: Yes PRESSURE: Yes REACTIVITY: No ACUTE: Yes CHRONIC: Yes

Abbreviations: N/D - Not Determined N/A - Not Applicable CA - Approximately

6. SUGGESTED FIRST AID

EYE CONTACT:

Immediately flush eyes with large amounts of water. Get immediate medical attention.

SKIN CONTACT:

Flush skin with large amounts of water. If irritation persists, get medical attention.

INHALATION:

Remove person to fresh air. If not breathing, give artificial respiration. If breathing is difficult, get immediate medical attention.

IF SWALLOWED:

Do not induce vomiting. Drink two glasses of water. Call a physician.

7. PRECAUTIONARY INFORMATION

EYE PROTECTION:

Avoid eye contact with vapor, spray, or mist. Wear vented goggles. Wear safety glasses with side shields.

SKIN PROTECTION:

Avoid prolonged or repeated skin contact. Wear appropriate gloves when handling this material. A pair of gloves made from the following material(s) are recommended: polyethylene/ethylene vinyl alcohol, polyvinyl alcohol, fluoroelastomer (Viton).

RECOMMENDED VENTILATION:

Use in a well-ventilated area. Provide sufficient ventilation to maintain emissions below recommended exposure limits. If exhaust ventilation is not adequate, use appropriate respiratory protection.

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-mask organic vapor respirator, full-face organic vapor respirator.

PREVENTION OF ACCIDENTAL INGESTION:

Wash hands after handling and before eating. Do not ingest.

RECOMMENDED STORAGE:

Store away from heat. Store at temperatures below 120 degrees F (49 degrees C). Keep out of the reach of children.

Abbreviations: N/D - Not Determined N/A - Not Applicable CA - Approximately

 7. PRECAUTIONARY INFORMATION (continued)

FIRE AND EXPLOSION AVOIDANCE:

Aerosol container contains flammable gas under pressure. Keep away from heat, sparks, open flame, and other sources of ignition. Extremely flammable liquid and vapor. Do not pierce or burn container, even after use. Avoid static discharge.

EXPOSURE LIMITS

INGREDIENT	VALUE	UNIT	TYPE	AUTH	SKIN*
LIMESTONE.....	10	MG/M3	TWA	ACGIH	
LIMESTONE.....	15	MG/M3	TWA	OSHA	
		AS DUST			
		TOTAL DUST			
LIMESTONE.....	5	MG/M3	TWA	OSHA	
		AS DUST			
		RESPIRABLE FRACTION			
TOLUENE.....	50	PPM	TWA	ACGIH	Y
TOLUENE.....	100	PPM	TWA	OSHAV	
		OSHA VACATED PEL			
TOLUENE.....	150	PPM	STEL	OSHAV	
		OSHA VACATED PEL			
TOLUENE.....	200	PPM	TWA	OSHA	
TOLUENE.....	300	PPM	CEIL	OSHA	
SOLVENT NAPHTHA (PETROLEUM), LIGHT ALIPHATIC.....	300	PPM	TWA	CMRG	
ASPHALT.....	0.5	MG/M3	TWA	ACGIH	
		as fume			
PROPANE.....	1000	PPM	TWA	OSHA	
PROPANE.....	2500	PPM	TWA	ACGIH	
BUTANE.....	800	PPM	TWA	ACGIH	
BUTANE.....	800	PPM	TWA	OSHA	
KAOLIN.....	2	MG/M3	TWA	ACGIH	
		as respirable dust			
KAOLIN.....	10	MG/M3	TWA	OSHAV	
		AS DUST			
		OSHA VACATED PEL: TOTAL DUST			
KAOLIN.....	15	MG/M3	TWA	OSHA	
		AS DUST			
		TOTAL DUST			
KAOLIN.....	5	MG/M3	TWA	OSHA	
		AS DUST			
		RESPIRABLE FRACTION			
MAGNESIUM ALUMINUM SILICATE.....	NONE	NONE	NONE	NONE	
OLEYL IMIDAZOLINE.....	NONE	NONE	NONE	NONE	
QUARTZ SILICA.....	0.1	MG/M3	TWA	OSHA	
		as quartz resp. dust			
QUARTZ SILICA.....	0.05	MG/M3	TWA	ACGIH	
		as quartz resp. dust			

 Abbreviations: N/D - Not Determined N/A - Not Applicable CA - Approximately

EXPOSURE LIMITS (continued)

INGREDIENT	VALUE	UNIT	TYPE	AUTH	SKIN*
------------	-------	------	------	------	-------

* SKIN NOTATION: Listed substances indicated with 'Y' under SKIN 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.

SOURCE OF EXPOSURE LIMIT DATA:

- ACGIH: American Conference of Governmental Industrial Hygienists
- CMRG: Chemical Manufacturer Recommended Exposure Guidelines
- OSHA: Occupational Safety and Health Administration
- OSHAV: Occupational Safety and Health Administration Vacated PEL. Vacated Permissible Exposure Limits (PEL) are enforced as the OSHA PEL in some states. Check with your local regulatory authority.
- NONE: None Established

8. HEALTH HAZARD DATA

EYE CONTACT:

Moderate Eye Irritation: signs/symptoms can include redness, swelling, pain, tearing, and hazy vision.

SKIN CONTACT:

Mild Skin Irritation: signs/symptoms can include redness, swelling, and itching.

May be absorbed through the skin and produce effects similar to those caused by inhalation and/or ingestion.

INHALATION:

Intentional concentration and inhalation may be harmful or fatal.

Central Nervous System Depression: signs/symptoms can include headache, dizziness, drowsiness, incoordination, slowed reaction time, slurred speech, giddiness and unconsciousness.

Irritation (upper respiratory): signs/symptoms can include soreness of the nose and throat, coughing and sneezing.

Prolonged or repeated overexposure, above recommended guidelines, may cause:

Central Neuropathy: signs/symptoms can include dizziness, incoordination, visual changes, emotional changes, tremors and convulsions.

Silicosis: signs/symptoms can include shortness of breath and

Abbreviations: N/D - Not Determined N/A - Not Applicable CA - Approximately

8. HEALTH HAZARD DATA (continued)

persistent coughing.

WHILE THE FOLLOWING EFFECTS ARE ASSOCIATED WITH ONE OR MORE OF THE INDIVIDUAL INGREDIENTS IN THIS PRODUCT AND ARE REQUIRED TO BE INCLUDED ON THE MSDS BY THE U.S. OSHA HAZARD COMMUNICATION STANDARD, THEY ARE NOT EXPECTED EFFECTS DURING FORESEEABLE USE OF THIS PRODUCT.

Prolonged or repeated overexposure, above recommended guidelines, may cause:

Liver Effects: signs/symptoms can include yellow skin(jaundice) and tenderness of upper abdomen.

IF SWALLOWED:

Ingestion is not a likely route of exposure to this product.

WHILE THE FOLLOWING EFFECTS ARE ASSOCIATED WITH ONE OR MORE OF THE INDIVIDUAL INGREDIENTS IN THIS PRODUCT AND ARE REQUIRED TO BE INCLUDED ON THE MSDS BY THE U.S. OSHA HAZARD COMMUNICATION STANDARD, THEY ARE NOT EXPECTED EFFECTS DURING FORESEEABLE USE OF THIS PRODUCT.

Ingestion may cause:

Irritation of Gastrointestinal Tissues: signs/symptoms can include pain, vomiting, abdominal tenderness, nausea, blood in vomitus, and blood in feces.

Central Nervous System Depression: signs/symptoms can include headache, dizziness, drowsiness, muscular weakness, incoordination, slowed reaction time, fatigue, blurred vision, slurred speech, giddiness, tremors and convulsions.

CANCER:

WARNING: Contains a chemical which can cause cancer. (14808-60-7) (NTP known human carcinogen, IARC human carcinogen 1, Calif. Proposition 65)

REPRODUCTIVE/DEVELOPMENTAL TOXINS:

WARNING: Contains a chemical which can cause birth defects. (108-88-3)

SECTION CHANGE DATES

PRECAUTIONARY INFO. SECTION CHANGED SINCE September 28, 2000 ISSUE

Abbreviations: N/D - Not Determined N/A - Not Applicable CA - Approximately

The information in this Material Safety Data Sheet (MSDS) is believed to be correct as of the date issued. 3M MAKES NO WARRANTIES, EXPRESSED OR IMPLIED, INCLUDING, BUT NOT LIMITED TO, ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE OR COURSE OF PERFORMANCE OR USAGE OF TRADE. User is responsible for determining whether the 3M product is fit for a particular purpose and suitable for user's method of use or application. Given the variety of factors that can affect the use and application of a 3M product, some of which are uniquely within the user's knowledge and control, it is essential that the user evaluate the 3M product to determine whether it is fit for a particular purpose and suitable for user's method of use or application.

3M provides information in electronic form as a service to its customers. Due to the remote possibility that electronic transfer may have resulted in errors, omissions or alterations in this information, 3M makes no representations as to its completeness or accuracy. In addition, information obtained from a database may not be as current as the information in the MSDS available directly from 3M.