

HLM 5000®

Version 1.2

01/05/2004

1. PRODUCT AND COMPANY INFORMATION

Company	:	Degussa Building Systems 889 Valley Park Drive Shakopee, MN 55379
Telephone	:	952-496-6000
Emergency telephone number	:	(800) 424-9300 (703) 527-3887 (Outside Continental US)
Product name	:	HLM 5000®
MSDS ID No.	:	11021
TSCA Inventory	:	All components of this product are included, or are exempt from inclusion, in the EPA Toxic Substances Control Act (TSCA) Chemical Substance Inventory.
Canadian DSL	:	All components of this product are included, or are exempt from inclusion, in the Canadian Domestic Substance List (DSL).
Product Use Description	:	Coating

2. HAZARDOUS INGREDIENTS

<u>Chemical</u>	<u>CAS No.</u>	<u>TLV</u>	<u>STEL</u>	<u>PEL</u>	<u>CEIL</u>	<u>Weight %</u>
ASPHALT, OXIDIZED	64742-93-4	N.E.	N.E.	N.E.	N.E.	10.00 - 15.00 %
STODDARD SOLVENT	8052-41-3	100 ppm	N.E.	500 ppm	N.E.	10.00 - 15.00 %
SOLVENT NAPHTHA (PETROLEUM), LIGHT AROMATIC	64742-95-6	N.E.	N.E.	N.E.	N.E.	5.00 - 10.00 %
PETROLEUM DISTILLATES, HYDROTREATED HEAVY NAPHTHENIC	64742-52-5	N.E.	N.E.	500 ppm	N.E.	1.00 - 5.00 %
1,2,4 TRIMETHYL BENZENE	95-63-6	25 ppm	N.E.	N.E.	N.E.	1.00 - 5.00 %
TOLUENE DIISOCYANATE MIX	26471-62-5	N.E.	N.E.	N.E.	N.E.	0.00 - 0.10 %

3. HAZARDS IDENTIFICATION

HMIS® Rating	HEALTH	FLAMMABILITY	REACTIVITY
	2	2	0

WHMIS Class : D2B

Primary Routes of Entry : Skin contact
Inhalation
Ingestion

Effects of Overexposure

Inhalation : Inhalation of high vapor concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting. Inhalation of high vapor concentrations can cause CNS-depression and narcosis. Prolonged inhalation can be harmful.

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- Skin : Prolonged skin contact may defat the skin and produce dermatitis. Prolonged or repeated exposure can cause skin irritation and redness.
- Eyes : Can cause slight irritation.
- Ingestion : Can cause slight irritation.
- Chronic exposure : This product contains solvents. Reports associate repeated and prolonged occupational overexposure to solvents with permanent brain and nervous system damage. Reports also indicate that solvents cause liver damage, kidney damage, and mucous membrane irritation. Be warned that intentional misuse by deliberately inhaling the vapors and/or the product contents (a process often called "sniffing") can be harmful or fatal. This product may contain a small amount (<0.1%) of toluene diisocyanate. NIOSH, NTP and IARC list toluene diisocyanate as a suspected carcinogen. Note also that prolonged repeated exposure to isocyanates can lead to skin sensitization. For persons so sensitized even brief exposures to an isocyanate can produce reddening, swelling, rash, or blisters. Similarly, prolonged and repeated exposure to isocyanates can lead to respiratory sensitization. In such individuals, brief exposures to isocyanates at levels well below established exposure limits can produce chemical asthma and nonspecific asthmatic conditions. Existing respiratory or skin ailments may be aggravated by exposure.

Carcinogenicity

	ACGIH	IARC	NTP	OSHA
ASPHALT, OXIDIZED	N.E.	N.E.	N.E.	N.E.
STODDARD SOLVENT	N.E.	No data.	N.E.	N.E.
SOLVENT NAPHTHA (PETROLEUM), LIGHT AROMATIC	N.E.	N.E.	N.E.	N.E.
PETROLEUM DISTILLATES, HYDROTREATED HEAVY NAPHTHENIC	N.E.	N.E.	N.E.	N.E.
1,2,4 TRIMETHYL BENZENE	N.E.	N.E.	N.E.	N.E.
TOLUENE DIISOCYANATE MIX	N.E.	No data.	Anticipated carcinogen.	N.E.

4. FIRST AID MEASURES

- Eye contact : Flush eyes with water, lifting upper and lower lids occasionally for 15 minutes. Seek medical attention.
- Skin contact : Remove contaminated clothing. Wash thoroughly with soap and water. If irritation persists seek medical attention. Wash contaminated clothing before reuse.
- Ingestion : Do not induce vomiting without medical advice. If conscious, drink plenty of water. If a person feels unwell or symptoms of skin irritation appear, consult a physician. If a person vomits, place him/her in the recovery position. Never give anything by mouth to an unconscious person.
- Inhalation : Remove victim from exposure. If difficulty with breathing, administer oxygen. If breathing has stopped administer artificial respiration, preferably mouth-to-mouth. Seek immediate medical attention.

5. FIRE-FIGHTING MEASURES

- Flash point : 120.00 °F (48.89 °C) Method: Pensky-Martin C.C.
- Autoignition temperature : no data available

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Lower explosion limit	:	0.9 %(V)
Upper explosion limit	:	7.0 %(V)
Suitable extinguishing media	:	carbon dioxide (CO2) dry chemical foam water fog
Fire and Explosion Hazards	:	Combustible Liquid. Can form explosive mixtures at temperatures at or above the flashpoint. Vapors can travel to a source of ignition and flash back. Empty containers retain product residue (liquid and/or vapor) and can be dangerous. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION; CONTAINERS MAY EXPLODE AND CAUSE INJURY OR DEATH. DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, STATIC ELECTRICITY, OR OTHER SOURCES OF IGNITION; CONTAINERS MAY EXPLODE AND CAUSE INJURY OR DEATH. Solid stream of water or foam can cause frothing.
Special Fire-fighting Procedures	:	At higher temperature pressure build up in sealed containers. Use water to cool containers exposed to fire. As in any fire, wear self-contained breathing apparatus pressure-demand (MSHA/NIOSH approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Methods for cleaning up	:	Ventilate the area and remove all sources of ignition. Evacuate unnecessary personnel. Take action to eliminate source of leak. Large spills should be handled carefully. Put on respiratory protection and necessary personal protective equipment. Dike or impound spilled Liquid. Contain and collect spillage with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and place in container for disposal according to local / national regulations (see section 13).
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7. HANDLING AND STORAGE

Handling	:	Use only in area provided with appropriate ventilation. Keep out of reach of children. Take precautionary measures against static discharges. Ground and bound containers when transferring material. For personal protection see section 8.
Storage	:	Keep containers tightly closed in a dry, cool and well-ventilated place.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Eye protection	:	Wear as appropriate: safety glasses with side-shields goggles face-shield
Hand protection	:	Wear Chemically resistant gloves.
Body Protection	:	Wear as appropriate: Chemically resistant clothes preventive skin protection

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- Respiratory protection : In case of insufficient ventilation wear suitable respiratory equipment. When workers are facing concentrations above the exposure limit they must use appropriate certified respirators.
- Hygienic Practices : Avoid contact with skin, eyes and clothing. Ensure adequate ventilation, especially in confined areas. Wash hands before breaks and at the end of workday. When using, do not eat, drink or smoke. Handle in accordance with good industrial hygiene and safety practice.
- Engineering Controls : Local exhaust ventilation can be necessary to control any air contaminants to within their TLVs during the use of this product.

9. PHYSICAL AND CHEMICAL PROPERTIES

- Color : black
- Physical State : paste
- Odor : strong solvent
- pH : no data available
- Odor Threshold : no data available
- Vapor Pressure : 8 mm/Hg at 77 °F (25 °C)
- Vapor Density : Heavier than air
- Boiling point/range : 307.99 - 700.00 °F (153.33 - 371.11 °C)
- Freeze Point : no data available
- Water solubility : slightly soluble
- Specific Gravity : 1.3
- Viscosity : no data available
- Evaporation rate : Slower than Butyl acetate
- Partition coefficient (n-octanol/water) : no data available
- VOC Concentration as applied (less water and exempt solvents) : 190 g/l

10. STABILITY AND REACTIVITY

- Stability : Stable under recommended storage conditions.
- Conditions to avoid : Heat, flames and sparks. Prolonged exposure to high temperatures
- Materials to avoid : oxidizing agents
- Hazardous decomposition products : Oxides of carbon

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Hazardous polymerization : Will not occur under normal conditions.

11. TOXICOLOGICAL INFORMATION

Acute inhalation toxicity

<u>Product</u>	<u>Type</u>	<u>Value</u>	<u>Species</u>	<u>Exposure time</u>
	LC50	no data available		
<u>Component</u>				
ASPHALT, OXIDIZED	LC50	no data available		
STODDARD SOLVENT	LC50	no data available		
SOLVENT NAPHTHA (PETROLEUM), LIGHT AROMATIC	LC50	no data available		
PETROLEUM DISTILLATES, HYDROTREATED HEAVY NAPHTHENIC	LC50	no data available		
1,2,4 TRIMETHYL BENZENE	LC50	no data available		
TOLUENE DIISOCYANATE MIX	LC50	no data available		

Acute oral toxicity

<u>Product</u>	<u>Type</u>	<u>Value</u>	<u>Species</u>
	LD50 (Oral)	no data available	
<u>Component</u>			
ASPHALT, OXIDIZED	LD50 (Oral)	no data available	
STODDARD SOLVENT	LD50 (Oral)	no data available	
SOLVENT NAPHTHA (PETROLEUM), LIGHT AROMATIC	LD50 (Oral)	4,700 mg/kg	rat
PETROLEUM DISTILLATES, HYDROTREATED HEAVY NAPHTHENIC	LD50 (Oral)	770 mg/kg	
1,2,4 TRIMETHYL BENZENE	LD50 (Oral)	no data available	
TOLUENE DIISOCYANATE MIX	LD50 (Oral)	4,130 mg/kg	rat

Acute dermal toxicity

<u>Product</u>	<u>Type</u>	<u>Value</u>	<u>Species</u>
	LD50 (Dermal)	no data available	
<u>Component</u>			
ASPHALT, OXIDIZED	LD50 (Dermal)	no data available	
STODDARD SOLVENT	LD50 (Dermal)	no data available	
SOLVENT NAPHTHA (PETROLEUM), LIGHT AROMATIC	LD50 (Dermal)	no data available	
PETROLEUM DISTILLATES, HYDROTREATED HEAVY NAPHTHENIC	LD50 (Dermal)	no data available	
1,2,4 TRIMETHYL BENZENE	LD50 (Dermal)	no data available	

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TOLUENE DIISOCYANATE MIX

LD50 (Dermal) 1,950 mg/kg

12. ECOLOGICAL INFORMATION

Ecotoxicological Information : There is no data available for this product.

13. DISPOSAL CONSIDERATIONS

Recommendations: Use excess product in an alternate beneficial application. Handle disposal of waste material in manner which complies with local, state, province and federal regulation.

14. TRANSPORT INFORMATION

This material is classified as a Combustible Liquid per DOT regulations; however, it is not regulated by DOT when shipped as non-bulk ground shipments. Bulk shipments of this material are subject to specific DOT requirements. Please consult DOT regulations for specific requirements.

DOT	: Proper shipping name	Not regulated
IATA	: Proper shipping name	PAINT
	UN-No	1263
	Class	3
	Packaging group	III
	Primary Label	Flammable liquid

15. REGULATORY INFORMATION

SARA 311/312 (RTK)

This product has been reviewed according to the EPA 'Hazard Categories' promulgated under Sections 311 and 312 of the Superfund Amendments and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

FIRE HAZARD IMMEDIATE (ACUTE) HEALTH HAZARD DELAYED (CHRONIC) HEALTH HAZARD

SARA 313

This product contains the following substances subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 and 40 CFR Part 372:

<u>Weight %</u>	<u>CAS No.</u>	<u>Chemical Name</u>
1.00 - 5.00 %	95-63-6	1,2,4 TRIMETHYL BENZENE
0.00 - 0.10 %	26471-62-5	TOLUENE DIISOCYANATE MIX

CERCLA

CERCLA section 103(a) specifically requires the person in charge of a vessel or facility to report immediately to the National Response Center (NRC) a release of a hazardous substance whose amount equals or exceeds the assigned RQ. The following hazardous substances are contained in this product.

<u>RQ</u>	<u>CAS No.</u>	<u>Chemical Name</u>
100 lbs	26471-62-5	TOLUENE DIISOCYANATE MIX

TSCA Section 12(b) Export Notification

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This product contains the following chemical substances subject to the reporting requirements of TSCA 12(b) if exported from the United States:

<u>CAS No.</u>	<u>Chemical Name</u>
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There are no TSCA 12(b) Chemicals in this product.

California Proposition 65

The chemical(s) noted below and contained in this product, are known to the state of California to cause cancer, birth defects or other reproductive harm. Unless otherwise specified in Section 2 of this MSDS, these chemicals are present at < 0.1%:

<u>CAS No.</u>	<u>Chemical Name</u>
108-88-3	TOLUENE
14808-60-7	SILICA, CRYSTALLINE QUARTZ
584-84-9	2,4-TOLUENE DIISOCYANATE
71-43-2	BENZENE
91-08-7	2,6 TOLUENE DIISOCYANATE

16. OTHER INFORMATION

Legend : N.E. - Not Established
TLV - Threshold Limit Value
STEL - Short Term Exposure Limit
PEL - Permissible Exposure Limit
CEIL - Ceiling

Prepared By : Environment, Health and Safety Department

This information is furnished without warranty, representation, or license of any kind, except that this information is accurate to the best of the manufacturer's knowledge, or is obtained from sources believed by the manufacturer to be accurate and is not intended to be all inclusive. No warranty is expressed or implied regarding the accuracy of this information or the results to be obtained from its use thereof. The manufacturer assumes no responsibility for injuries proximately caused by use of the Material if reasonable safety procedures are not followed as stipulated in this Data Sheet. Additionally, the manufacturer assumes no responsibility for injuries proximately caused by abnormal use of the Material even if reasonable safety procedures are followed. Buyer assumes the risk in its use of the Material.

End of MSDS.