



## MATERIAL SAFETY DATA SHEET

**PRODUCT: Fortane MVS Ultra™ Moisture Vapor & Acoustical Urethane Membrane**

Prepared: 23 March 2009  
Supersedes: 25 November 2008

### SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

**Product:** Fortane MVS Ultra™ Moisture Vapor Urethane Membrane

**Chemical Family:** Aromatic isocyanate

**Product Use:** Adhesive

**Manufacturer:** Chemque, Inc.  
6101 Guion Road  
Indianapolis, IN 46254

**Telephone Number:** (317) 291-9107

**In Emergency Only:** CANUTEC Collect: (613) 996-6666 (24-hour hotline)  
Information: (613) 992-4624

### SECTION 2: HAZARDS IDENTIFICATION

**Emergency Overview:** Forest Green-coloured, thick liquid with a sweet odour.  
Harmful if swallowed.  
May cause eye, skin, and/or respiratory tract irritation.  
Potential skin and respiratory sensitizer.  
Combustible.

**Potential Health Effects:**  
Eyes – Irritant.  
Skin – Irritant. Sensitizer. Prolonged or repeated contact can lead to irritation.  
Inhalation – Irritant. Sensitizer. May cause nausea and/or headaches. Persons with a history of respiratory problems (i.e., asthma) should not be exposed to this product in a closed environment.  
Ingestion – Irritant. May cause adverse health effects.  
Chronic Effects – Prolonged or repeated inhalation of isocyanate vapours can cause lung damage. Heating of the product may release additional vapours.

### SECTION 3: HAZARZOUS INGREDIENT INFORMATION

Ingredient	% (W/W)	CAS Number
Polymeric diphenylmethane isocyanate	1-5	9016-87-9
C10-C13 Isoalkanes	1-5	68551-17-7
Dibutyltin dilaurate	0.1-1	77-58-7



## MATERIAL SAFETY DATA SHEET

**PRODUCT: Fortane MVS Ultra™ Moisture Vapor & Acoustical Urethane Membrane**

Prepared: 23 March 2009  
Supersedes: 25 November 2008

### SECTION 4: FIRST AID MEASURES

<b>Eyes:</b>	Flush open eyes with water for 15 minutes. Seek medical attention if irritation persists.
<b>Skin:</b>	Remove affected clothing. Wash skin with soap and water immediately. Wash contaminated clothing before re-use. Seek medical attention if irritation persists.
<b>Inhalation:</b>	Move to fresh air. Administer oxygen if necessary. Seek medical attention.
<b>Ingestion:</b>	Do not induce vomiting. Give at least two glasses of milk or water. Never give anything by mouth to an unconscious person. Seek medical attention immediately.

### SECTION 5: FIRE FIGHTING MEASURES

<b>Flammable Properties:</b>	Isolate from heat and open flame. Closed container may pressurize and explode when exposed to extreme heat. Material releases CO <sub>2</sub> on contamination with moisture, and may pressurize and explode.
<b>Extinguishing Media:</b>	CO <sub>2</sub> , chemical foam, dry chemical. Do not use water jet.
<b>Protection of Fire Fighters:</b>	Self contained breathing apparatus and full protective clothing should be worn by fire fighters.

### SECTION 6: ACCIDENTAL RELEASE MEASURES

<b>Personal Precautions:</b>	Use personal protective equipment as recommended in Section 8.
<b>Environmental Precautions:</b>	Do not empty into drains or discharge into the soil/subsoil.
<b>Methods for Containment:</b>	Cover spill with absorbent material. Place in an open-top container and remove to a ventilated area. Allow to sit in an open container for 24 hours.
<b>Methods for Clean-Up:</b>	Decontaminate absorbent and spill area with a solution of 8% ammonia, 2% detergent and 90% water.

### SECTION 7: HANDLING AND STORAGE

<b>General Warning to Prevent Exposure:</b>	Do not breathe fumes or vapours. Avoid contact with eyes, skin, and clothing. Wash thoroughly after handling.
<b>General Storage Information:</b>	Store in tightly-sealed containers in a cool, dry area. Keep away from moisture. Do not open containers until ready to use. Inspect containers regularly to ensure that product is not building pressure. If containers show signs of pressurization, place a tarpaulin over the container and relieve the pressure by puncturing the lid with a long-handled spike. (Only those required for this operation should be in the area.)

ISO 9001:2000 REGISTERED



## MATERIAL SAFETY DATA SHEET

**PRODUCT: Fortane MVS Ultra™ Moisture Vapor & Acoustical Urethane Membrane**

Prepared: 23 March 2009  
Supersedes: 25 November 2008

### SECTION 8: EXPOSURE CONTROLS AND PERSONAL PROTECTION

Ingredient	Exposure Limit	Unit
Polymeric diphenylmethane diisocyanate	0.05 (ACGIH- TLV)	mg/m3
C10-C13 Isoalkanes	Not established	
Dibutyltin dilaurate	0.2 (ACGIH STEL_	mg/m3
<b>Engineering Controls:</b>	<u>Outdoor application:</u> None required. <u>Indoor application/enclosed areas:</u> Use local exhaust ventilation (general mechanical) to keep vapour concentrations below TLV.	
<b>Personal Protective Equipment:</b>	<u>Eyes:</u> Safety glasses with side shields, or goggles. <u>Skin:</u> Chemical-resistant rubber or plastic gloves. Impervious clothing and boots to prevent skin contact. <u>Inhalation:</u> NIOSH-approved organic respirator if TLV is exceeded. (Respirator not required for outdoor applications.) <u>Other:</u> Eye bath.	

### SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

<b>Appearance:</b>	Thick Forest Green -coloured liquid.
<b>Odour:</b>	Sweet.
<b>Melting Point:</b>	N/E
<b>Boiling Point:</b>	N/E
<b>Flash Point and Method:</b>	72.78 C (163 F) Seta Flash Closed Cup
<b>Evaporation Rate</b> (Butyl acetate = 1)	N/E
<b>Upper/Lower Flammable Limits:</b>	N/E
<b>Vapour Pressure @ 77°F:</b>	ca. 0.00016mmHg
<b>Vapour Density:</b>	N/E
<b>Specific Gravity @ 77°F:</b>	1.45
<b>Solubility:</b>	Insoluble in water.

### SECTION 10: STABILITY AND REACTIVITY

<b>Chemical Stability:</b>	Stable.
<b>Conditions to Avoid:</b>	Moisture, excessive heat.
<b>Incompatible Materials:</b>	Water, strong bases, alcohols.
<b>Hazardous Decomposition Products:</b>	Carbon dioxide and carbon monoxide will form at temperatures exceeding 500 F (260 C).
<b>Possibility of Hazardous Reactions:</b>	Will not occur.

ISO 9001:2000 REGISTERED



## MATERIAL SAFETY DATA SHEET

**PRODUCT: Fortane MVS Ultra™ Moisture Vapor & Acoustical Urethane Membrane**

Prepared: 23 March 2009  
Supersedes: 25 November 2008

### SECTION 11: TOXICOLOGICAL INFORMATION

<b>Acute Dose Toxicity:</b>	Polymeric diphenylmethane diisocyanate	Oral LD50	> 5000 mg/kg (rat)
		Dermal LD50	> 5000 mg/kg (rabbit)
	C10-C13 Isoalkanes	Oral LD50	34 g/kg (rat)
		Dermal	15.4 g/kg (rabbit).
	Dibutyltin dilaurate	Oral LD50	> 2000 mg/kg (rat)
<b>Repeated Dose Toxicity:</b>	N/E		
<b>Sensitization:</b>	May cause sensitization by skin contact or by inhalation.		
<b>Carcinogenicity:</b>	N/E		
<b>Neurological Effects:</b>	N/E		
<b>Genetic Effects:</b>	N/E		
<b>Reproductive Effects:</b>	N/E		
<b>Developmental Effects:</b>	Contains dibutyltin dilaurate which has shown teratogenic results in animal testing.		
<b>Target Organ Effects:</b>	Lungs – chronic inhalation can cause respiratory distress and respiratory impairments		

### SECTION 12: ECOLOGICAL INFORMATION

**Biodegradability** Not readily biodegradable.

### SECTION 13: DISPOSAL CONSIDERATIONS

Recover or recycle if possible.

Uncured product is hazardous waste. Incinerate in accordance with federal, state, and local environmental controls/regulations. Dispose of cured non-hazardous product in accordance with the same regulations.

All provided information only applies to the material as supplied to the user. The characteristics outlined may not apply if the material has been used or otherwise contaminated. It is the responsibility of the user to determine the proper waste identification and disposal methods in compliance with applicable regulations.

### SECTION 14: TRANSPORT INFORMATION

NOT REGULATED FOR TRANSPORT

ISO 9001:2000 REGISTERED



## MATERIAL SAFETY DATA SHEET

**PRODUCT: Fortane MVS Ultra™ Moisture Vapor & Acoustical Urethane Membrane**

Prepared: 23 March 2009  
Supersedes: 25 November 2008

### SECTION 15: REGULATORY INFORMATION

**US Regulations:**

All of the components of this material appear on the "Toxic Substances Control Act" (TSCA) inventory.  
This material is classified as hazardous under OSHA regulation 29 CFR 1910.1200.  
SARA Title III: This product contains the following chemicals subject to the reporting requirements of section 313 of the Emergency Planning and Community Right-To-Know Act (EPCRA) of 1986 and 40 CFR 372:  
Polymeric diphenylmethane diisocyanate CAS # 9016-87-9

### SECTION 16: Other Information

Abbreviations: N/E

Not established

The conditions of your use and application of our products, technical assistance and information (whether verbal, written or by way of production evaluations), including any suggested method of application and recommendations are beyond our control. Therefore it is imperative that you test our products, technical assistance and information to determine to your own satisfaction whether they are suitable for your intended uses and applications. This application-specific analysis at least must include testing to determine suitability from a technical as well as health, safety, and environmental standpoint. Such testing has not necessarily been done at Chemque. All information is given without warranty or guarantee. It is expressly understood and agreed that the customer assumes and hereby expressly releases Chemque from all liability, in tort, contract or otherwise, incurred in connection with the use of our products, technical assistance and information. Any statement or recommendation not contained herein is unauthorized and shall not bind Chemque. Nothing herein shall be construed as a recommendation to use any product in conflict with patents covering any material or its use. No license is implied or in fact granted under the claims of any patent.

G:\Product Information\Fortane\Word Files - Access Denied\MSDS\The Americas\Current\Fortane MVS-0903 - The Americas.doc

**ISO 9001:2000 REGISTERED**