

## SAFETY DATA SHEET

### VAPOR-STOP/VERTICAL COMPONENT B

#### 1. PRODUCT AND COMPANY IDENTIFICATION

**PRODUCT NAME:** VAPOR-STOP/VERTICAL COMPONENT B

**PRODUCT CODE:** #VSB

**PRODUCT USE:** Isocyanate component of cementitious urethane topping.

**MANUFACTURER**

DUDICK, INC.

1818 MILLER PARKWAY

STREETSBORO, OH, 44241

330-562-1970

**24 HR. EMERGENCY TELEPHONE NUMBER**

**CHEM-TEL (US Transportation):** (800)255-3924

**CHEM-TEL (International Transportation) :** +01(813)248-0585

#### 2. HAZARDS IDENTIFICATION

**CLASSIFICATION:**

Specific target organ toxicity - single exposure - Respiratory tract irritation - Category 3

Acute Toxicity - Inhalation - Category 4

Skin Irritant - Category 2

Skin Sensitizer - Category 1

Serious Eye Damage/Eye Irritation - Category 2

Specific target organ toxicity - multiple exposures - Respiratory tract irritation - Category 3

Respiratory Sensitizer - Category 1

**GHS LABEL ELEMENTS:**



**SIGNAL WORD:** Danger

**HAZARD STATEMENTS:**

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H302 Harmful if swallowed.

H315 Causes skin irritation.

H317 May cause an allergic skin reaction.

H319 Causes serious eye irritation.

H332 Harmful if inhaled.

H335 May cause respiratory irritation.

H373 Causes damage to organs through prolonged or repeated exposure

**PRECAUTIONARY STATEMENTS :**

P285 In case of inadequate ventilation wear respiratory protection.

P260 Do not breathe dust/fume/gas/mist/vapours/spray.

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P304+P340+P312 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.  
P202 Do not handle until all safety precautions have been read and understood.  
P403+P233 Store in a well-ventilated place. Keep container tightly closed.  
P405 Store locked up.  
P337+P313 If eye irritation persists: Get medical advice/attention.  
P362 Take off contaminated clothing and wash before reuse.  
P501 Dispose of contents/container in accordance with local, regional, and federal regulations.  
P264 Wash all contacted body parts thoroughly after handling.  
P270 Do not eat, drink or smoke when using this product.  
P271 Use only outdoors or in a well-ventilated area.  
P272 Contaminated work clothing should not be allowed out of the workplace.  
P280 Wear protective gloves/protective clothing/eye protection/face protection.  
P302+P352 IF ON SKIN: Wash with plenty of soap and water.  
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
P308+P313 IF exposed or concerned: Get medical advice/attention.  
P333+P313 If skin irritation or rash occurs: Get medical advice/attention.

### 3. COMPOSITION/INFORMATION ON HAZARDOUS INGREDIENTS

Chemical Name	Weight %	CAS Number
Bis(4-isocyanatophenyl)methane	45% to 60%	101-68-8
Isocyanic acid, polymethylenepolyphenylene ester	25% to 40%	9016-87-9
MDI Mixed Isomers	7% to 15%	26447-40-5

No further information available for this product.

### 4. FIRST AID MEASURES

**EYES:** Hold open eyelids and flush with copious amounts of water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If irritation persists, get medical advice/attention.

**SKIN:** Wash with plenty of soap and water. If skin irritation or rash occurs: Get medical advice/attention. Take off contaminated clothing and wash before reuse.

**INGESTION:** Do not induce vomiting. Rinse mouth out and give plenty of water. Never give anything by mouth to an unconscious person. Consult physician.

**INHALATION:** If breathing is difficult, oxygen should be administered by qualified personnel. Consult a physician after significant exposure. Move person to fresh air. If unconscious place in recovery position and seek medical advice.

**NOTES TO PHYSICIAN:** No data available for this product.

### 5. FIRE FIGHTING MEASURES

**SUITABLE EXTINGUISHING MEDIA:** Alcohol resistant foam; Carbon Dioxide (CO<sub>2</sub>); dry chemical; dry sand; use water to keep containers cool.

**UNSUITABLE EXTINGUISHING MEDIA:** Do not use high pressure water jet as this may spread the area of the fire.

**SPECIFIC HAZARDS IN CASE OF FIRE:** Avoid contact with product. Decontaminate equipment and protective clothing prior to reuse. During a fire, isocyanate vapors and other irritating, highly toxic gases may be generated by thermal decomposition or combustion. Exposure to heated diisocyanate can be extremely dangerous.

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Closed container may forcibly rupture under extreme heat or when contents are contaminated with water (CO<sub>2</sub> formed). Use cold-water spray to cool fire-exposed containers to minimize the risk of rupture. Large fires can be extinguished with large volumes of water applied from a safe distance, since reaction between water and hot diisocyanate can be vigorous.

**SPECIAL PROTECTIVE EQUIPMENT AND PRECAUTION FOR FIRE FIGHTERS:** Wear self-contained breathing apparatus (SCBA) in positive pressure mode and full protective clothing.

## 6. ACCIDENTAL RELEASE MEASURES

**PERSONAL PRECAUTIONS:** Isolate area. Keep unnecessary and unprotected personnel from entering the area. Use appropriate safety equipment.

**ENVIRONMENTAL PRECAUTIONS:** Prevent from entering into soil, ditches, sewers, waterways and/or groundwater.

**METHOD AND MATERIALS FOR CONTAINMENT AND CLEANING UP:** Minor Spill or Leak (Wet surface): Cover spill area with suitable absorbent material (Kitty Litter, Oil-Dri®, etc). Saturate absorbent material with neutralization solution and mix. Wait 15 minutes. Collect material in open-head metal containers. Repeat applications of decontamination solution, with scrubbing, followed by absorbent until the surface is decontaminated. Check for residual surface contamination. Apply lid loosely and allow containers to vent for 72 hours to let carbon dioxide (CO<sub>2</sub>) escape.

Neutralization solution:

A mixture of 90% water, 3-8% ammonium hydroxide or concentrated ammonia, and 2% liquid detergent.

## 7. HANDLING AND STORAGE

**PRECAUTIONS FOR SAFE HANDLING:** Use only in well-ventilated areas. Avoid contact with skin and eyes. Avoid breathing vapors and/or aerosols. Emergency showers and eye wash stations should be readily accessible. Use personal protective equipment. When using, do not eat, drink or smoke.

**CONDITIONS FOR SAFE STORAGE, INCLUDING INCOMPATIBILITIES:** Store in tightly closed containers to prevent moisture contamination. Do not reseal if contamination is suspected.

Storage temperature:

minimum:

5 °C (40 °F)

maximum:

40 °C (104 °F)

## 8. EXPOSURE CONTROLS\PERSONAL PROTECTION

### EXPOSURE LIMITS

Components	CAS	Limits
Bis(4-isocyanatophenyl)methane	101-68-8	ACGIH TLV; TWA 0.005 ppm NIOSH REL; TWA 0.005 ppm 12:00:00 AM
Isocyanic acid, polymethylenepolyphenylene ester	9016-87-9	None established.
MDI Mixed Isomers	26447-40-5	None established.

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**ENGINEERING CONTROLS:** Ventilation:

Use local exhaust ventilation, or other engineering controls to maintain airborne levels requirements or guidelines.

General ventilation may not be sufficient.

**PERSONAL PROTECTIVE EQUIPMENT**

**RESPIRATORY PROTECTION:** For situations where the airborne concentrations may exceed the level for which an air purifying respirator is effective, or where the levels are unknown or Immediately Dangerous to Life or Health (IDLH), use NIOSH-certified full facepiece pressure demand self-contained breathing apparatus (SCBA) or a full facepiece pressure demand supplied-air respirator (SAR) with escape provisions. When atmospheric levels may exceed the occupational exposure limit (PEL or TLV) NIOSH-certified air-purifying respirators equipped with an organic vapor sorbent and particulate filter can be used as long as appropriate precautions and change out schedules are in place.

**EYES PROTECTION:** Full face shield with goggles underneath.

**SKIN PROTECTION:** Avoid all skin contact. Depending on the conditions of use, cover as much of the exposed skin area as possible with appropriate clothing to prevent skin contact., Gloves, long sleeved shirts and pants. Nitrile rubber gloves., Butyl rubber gloves., Neoprene gloves

**WORK HYGIENIC PRACTICES:** Use good personal hygiene. Do not consume or store food in the work area. Wash hands before smoking or eating. Wash contaminated clothing before reuse. Eye wash stations and emergency showers should be available.

**OTHER USE PRECAUTIONS:** No data available for this product.

**COMMENTS:** No data available for this product.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**PHYSICAL STATE:** Liquid

**COLOR:** Dark amber/brown

**FLASH POINT AND METHOD:** No data available for this product.

**AUTO-IGNITION TEMPERATURE:** Not Determined.

**BOILING POINT/RANGE:** No data available for this product.

**MELTING POINT:** Not Determined.

**VAPOUR PRESSURE:** Not determined.

**VAPOUR DENSITY:** Heavier than air.

**SOLUBILITY:** Not determined.

**ODOR/THRESHOLD:** Mild, characteristic.

**LOWER / UPPER FLAMMABLE LIMITS:** No data available for this product.

**DENSITY:** 1.2009

**EVAPORATION RATE:** Slower than ether.

**PARTITION COEFFICIENT:** Not determined.

**pH:** Not Applicable.

**DECOMPOSITION TEMPERATURE:** Not determined.

## 10. STABILITY AND REACTIVITY

**CHEMICAL STABILITY:** This product is stable under normal storage conditions.

**POSSIBILITY OF HAZARDOUS REACTIONS:** Contact with moisture, other materials that react with isocyanates, or temperatures above 350 F (177 C), may cause rapid/violent polymerization.

**CONDITIONS TO AVOID:** Heat, flames and sparks. Protect from freezing.

**MATERIALS TO AVOID:** Water, Amines, Strong bases, Alcohols, Copper alloys.

**HAZARDOUS DECOMPOSITION PRODUCTS:** By Fire and High Heat: Carbon dioxide (CO<sub>2</sub>), carbon monoxide (CO), oxides of nitrogen (NO<sub>x</sub>), dense black smoke., Hydrogen cyanide, Isocyanate, Isocyanic Acid, Other undetermined compounds.

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## 11. TOXICOLOGICAL INFORMATION

### SIGNS AND SYMPTOMS OF OVEREXPOSURE:

#### ACUTE EFFECTS:

**EYE CONTACT:** May cause eye irritation. Corneal injury is unlikely.

**SKIN CONTACT:** Has caused allergic skin reactions in humans. Contains component(s) which have demonstrated the potential for contact allergy in mice.

**INHALATION:** Inhalation of vapors and/or aerosols in high concentration may cause irritation of respiratory system. Inhalation of aerosol may cause irritation to the upper respiratory tract. May cause nose, throat, and lung irritation. This material can produce asthmatic sensitization upon either single inhalation exposure to a relatively high concentration or upon repeated inhalation exposures to lower concentrations.

**INGESTION:** Ingestion may cause gastrointestinal tract irritation.

**TARGET ORGAN:** STOT - single exposure

May cause respiratory irritation.

STOT - repeated exposure

Remarks: May cause damage to organs through prolonged or repeated exposure.

**CHRONIC EFFECTS:** This product contains no listed carcinogens according to IARC, ACGIH, NTP and/or OSHA in concentrations of 0.1 percent or greater. May cause allergic skin reaction, eye disease, skin disorders and allergies. This material can produce asthmatic sensitization upon either single inhalation exposure to a relatively high concentration or upon repeated inhalation exposures to lower concentrations.

#### TOXICITY VALUES: Oral:

Type of value: LD50

Species: rat

Value: > 10.000 mg/kg

Practically nontoxic.

Inhalation:

Type of value: LC50

Species: rat

Exposure time: 4 h

Toxic.

## 12. ECOLOGICAL INFORMATION

### PERSISTENCE AND DEGRADABILITY:

Not determined.

### BIO-ACCUMULATIVE POTENTIAL:

Not determined.

### MOBILITY IN SOIL:

Not determined.

### OTHER ADVERSE EFFECTS:

Not known.

### ECOTOXICOLOGICAL OTHER INFORMATION:

Not determined.

## 13. DISPOSAL CONSIDERATIONS

**DISPOSAL METHOD:** Dispose of according to local, state, and federal regulations through a licensed disposal facility.

## 14. TRANSPORT INFORMATION

**UN NUMBER:** Not regulated.

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**UN PROPER SHIPPING NAME:** Not regulated.

**TRANSPORT HAZARD CLASS:**

Not applicable.

**TRANSPORT HAZARD SUBCLASS:**

Not applicable.

**PACKING GROUP:** Not applicable.

**MARINE POLLUTANT Y/N:**

No data available for this product.

**SPECIAL PRE-CAUTIONS:** None

## 15. REGULATORY INFORMATION

### U.S. REGULATIONS:

All components of this product are listed on or exempt from the TSCA Inventory.

### U.S. SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

#### 311/312 HAZARD CATEGORIES:

**FIRE:** No

**PRESSURE GENERATING:** No

**REACTIVITY:** No

**ACUTE:** Yes

**CHRONIC:** Yes

#### 313 REPORTABLE INGREDIENTS:

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Chemical Name	Weight %	CAS
Bis(4-isocyanatophenyl)methane	50% to 55%	101-68-8
Isocyanic acid, polymethylenepolyphenylene ester	35% to 40%	9016-87-9

### 302/304 EMERGENCY PLANNING

**EMERGENCY PLAN:** No reportable components

### STATE REGULATIONS:

No components are on the California Proposition 65 list.

#### Massachusetts Right To Know Components

Chemical Name	CAS
Bis(4-isocyanatophenyl)methane	101-68-8

#### Pennsylvania Right To Know Components

Chemical Name	CAS
Bis(4-isocyanatophenyl)methane	101-68-8
Isocyanic acid, polymethylenepolyphenylene ester	9016-87-9

#### New Jersey Right To Know Components

Chemical Name	CAS
Bis(4-isocyanatophenyl)methane	101-68-8
Isocyanic acid, polymethylenepolyphenylene ester	9016-87-9

**OTHER GOVT. REGULATIONS:** No other information available

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## 16. OTHER INFORMATION

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