SECTION 1: IDENTIFICATION

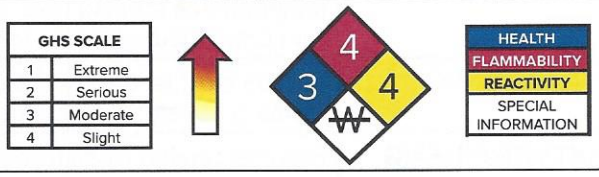
PRODUCT NAME	**SafeBase 2.5 "A" Component**
CAS NUMBER	Not available
PRODUCT USE	Polyurethane Foam
DISTRIBUTOR	Safe Basements LLC
ADDRESS	60335 US HWY 12, Litchfield, MN 55355
PHONE	800-430-5851
FAX	Not available
EMERGENCY CONTACT	FOR SPILLS, LEAKS, FIRE, OR EXPOSURE CALL **CHEMTREC**
TOLL FREE	**800-424-9300**
INTERNATIONAL	+1-703-527-3887
FAX	913-321-1490

SECTION 2: HAZARDS IDENTIFICATION

GHS CLASSIFICATION

GHS PICTOGRAM

NEW GHS SCALE



DANGER

Personal Protective Equipment

EMERGENCY OVERVIEW

HAZARD STATEMENTS		PRECAUTIONARY STATEMENTS	
H332	Harmful if inhaled.	P264	Wash hands thoroughly after handling.
H373	May cause damage to organs through prolonged or repeated exposure by inhalation.	P260	Do not breathe fume/mist/vapors/spray.
H319	Causes serious eye irritation.	P271	Use only outdoors or in a well-ventilated area.
H335	May cause respiratory irritation.	P272	Contaminated work clothing should not be allowed out of the workplace.
H315	Causes skin irritation.	P280	Wear protective gloves/protective clothing/eye protection/face protection.
H334	May cause allergy or asthma symptoms or breathing difficulties if inhaled.	P285	In case of inadequate ventilation, wear respiratory protection.
H317	May cause an allergic skin reaction.	P270	Do not eat, drink, or smoke when using this product.
H303	May be harmful if swallowed.		

APPEARANCE, COLOR, ODOR: Liquid, dark brown, musty.

USA: This material is considered hazardous to health by the OSHA Hazard Communication Standard (29 CFR 1910-1200).

READ THE ENTIRE SDS FOR MORE THOROUGH EVALUATION OF THE HAZARDS

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

CHEMICAL NAME	CAS NUMBER	% WEIGHT
Polymethylene polyphenylene isocyanate	9016-87-9	30-70
Diphenylmethane 4,4'- diisocyanate	101-68-8	30-70

"Proudly Manufactured in the USA"

SECTION 4: FIRST AID MEASURES		
EYE:	**H319**	Causes serious eye irritation. IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. IF eye irritation persists: Get medical advice/attention.
SKIN:	**H315/317**	Causes skin irritation and may cause allergic skin reaction/sensitization. IF ON SKIN: wash with plenty of soap and water. IF SKIN irritation or rash occurs: Get medical advice/attention. Wash contaminated clothing before use.
INHALATION:	**H334**	May cause allergy or asthma symptoms or breathing difficulties if inhaled. IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. IF experiencing respiratory symptoms: call a POISON CENTER or doctor/physician.
INGESTION:	**H303**	May be harmful if swallowed. IF SWALLOWED: Rinse mouth. Do not induce vomiting. Call a POISON CENTER or doctor/physician IF you feel unwell.
NOTES TO PHYSICIAN:		Symptomatic and supportive therapy as needed. Following severe exposure, medical follow-up should be monitored for 48 hours.

SECTION 5: FIRE FIGHTING MEASURES	
FLASH POINT:	446°F (230°C) closed cup.
HAZARDS WHEN ON FIRE OR NEAR FLAME:	Toxic fumes may be released in fire situations. Product can decompose at high temperatures forming toxic gases. Closed containers may develop pressure and rupture with prolonged exposure to heat.
SUITABLE EXTINGUISHING MEDIA:	Carbon dioxide, dry chemical powder, foam, water fog or fine spray. Alcohol resistant foams are preferred for large fires. Use water spray to cool fire-exposed containers.
UNSUITABLE EXTINGUISHING MEDIA:	Exercise caution when using water. Water contamination of product will generate CO_2 gas.
SPECIAL EXPOSURE HAZARDS:	During a fire, products of combustion may include carbon monoxide, carbon dioxide, hydrogen cyanide, nitrogen oxides, dense smoke, and irritating or toxic fumes. Reacts vigorously with water above 122°F (50°C). Closed containers may rupture violently when heated. Polymeric MDI decomposes rapidly above 400°F (204°C).
SPECIAL PROTECTIVE EQUIPMENT FOR FIRE FIGHTERS:	Firefighters should wear full protective gear including self-contained breathing apparatus when fighting chemical fires. Fight fire from a protected location or a safe distance. When using water care must be taken since the reaction between water and hot Polymeric MDI can be vigorous.

SECTION 6: ACCIDENTAL RELEASE MEASURES	
ACCIDENTAL RELEASE MEASURES:	For major spills call **CHEMTREC**: Toll free **1-800-424-9300** for international call **1-703-527-3887**.
PERSONAL PRECAUTIONS:	Wear appropriate personal protective equipment recommended in SECTION 8: EXPOSURE CONTROL/PERSONAL PROTECTION of this SDS. Immediately contact emergency personnel. Evacuate the area. Keep upwind avoiding inhalation of vapors. Clean-up should only be performed by trained personnel. People dealing with major spillages should wear full protective clothing including respiratory protection.
ENVIRONMENTAL PRECAUTIONS:	This material may contaminate the environment without proper control and response to spills. Ensure spilled material does not come in contact with soil, waterway, drains, sewers, or other runoff that would further disperse the material. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil, or air). Sources of ignition should be kept clear.
METHODS FOR CONTAINMENT:	Use diking or capping to control migration. Contain and absorb large spillages with a non-flammable absorbent carrier (such as vermiculite, earth, or sand). DO NOT USE combustible materials such as sawdust. Shovel into open-top drums or plastic bags for further decontamination, if necessary. Remove and properly dispose of residues. Dispose of via a licensed waste disposal contractor (See SECTION 13: DISPOSAL CONSIDERATIONS) Notify applicable government authorities if release is reportable.

METHODS FOR CLEANING UP:	Only proceed with clean up by taking the appropriate personal protection measures required and ensure surrounding area does not contain further hazards that could worsen the spill, cause migration, or cause further harm (i.e. eliminate any ignition sources). Wash area with decontamination solution of 0.2-0.5% liquid detergent and 3-8% concentrated ammonium hydroxide. Move any non-contaminated, non-leaking containers from the spill zone if it can be done safely. Dike, dam, or further restrict and stop active leaks without posing further damage or harm to individuals, the environment, and/or structures. Contain and collect spillage. See SECTION 13: DISPOSAL CONSIDERATIONS for disposal information and SECTION 8: EXPOSURE CONTROL/ PERSONAL PROTECTION for recommended Personal Protective Equipment (PPE). Obey all local, state, and federal regulations during clean up.

SECTION 7: HANDLING & STORAGE

GENERAL:	Ideal storage temperature is 60-90°F (15-32°C). Handling and storage shall be in accordance with local, state/provincial, or federal regulations.
HANDLING:	Before opening this package, read and follow warning labels on all components. Avoid contact with the product or reaction mixture. Put on appropriate personal protective equipment. Use only with adequate ventilation to ensure that the occupational exposure limit is not exceeded, use respirator when ventilation is inadequate. Avoid breathing aerosols, mists, and vapors. (See SECTION 8: EXPOSURE CONTROL/ PERSONAL PROTECTION for details). Do not ingest. Eating, drinking, and smoking shall be prohibited in areas where this material is handled, stored, and processed. Workers shall wash hands and face before eating, drinking, and smoking. Persons with a history of skin sensitization problems, asthma, allergies, or chronic or recurrent respiratory disease should not be employed in any process in which this product is used. Do not get in eyes, on skin, or clothing. Keep in the original container or an approved alternative made from a compatible material. Kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse containers.
STORAGE:	Store in a dry, well-ventilated area, out of direct sunlight and away from heat, sources of ignition and incompatible materials. Ideal storage temperature is 60-90°F (15-38°C). Keep contents away from moisture; Polymeric MDI reacts with water producing CO_2 gas, a hazardous build-up of pressure could result if contaminated containers are re-sealed. Purge the container with argon or nitrogen before re-sealing. Do not re-seal contaminated containers. Store product in original container.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

EXPOSURE LIMITS:

COMPONENT NAME	CAS NUMBER	EXPOSURE LIMITS
Polymethylene polyphenylene isocyanate	9016-87-9	Not available
Diphenylmethane 4,4'- diisocyanate	101-68-8	**ACGIH TLV (United States, 3/2012)** TWA: 0.005 ppm 8 hour(s) **OSHA PEL (United States, 6/2010)** CEIL: 0.02 ppm CEIL: 0.2 mg/m^3 **NIOSH REL (United States, 12/2001)** CEIL: 0.2 mg/m^3 10 minute(s) CEIL: 0.02 ppm 10 minute(s) TWA: 0.05 mg/m^3 10 hour(s) TWA: 0.005 ppm 10 hour(s)

ENGINEERING CONTROLS:	Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor, or mist, use process enclosures, local exhaust ventilation, and other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits.
HYGIENE MEASURES:	Wash hands, forearms, and face thoroughly with plenty of soap and water after handling chemical products, before eating, smoking, and using the restroom and at the end of the working period. Appropriate engineering, administrative, and other best practice decontamination control measures must be used to isolate contaminates on clothing and to prevent unintended migration of contaminants. Handle clothing and other potentially contaminated material appropriately and in compliance with local, state, and federal regulations in the process of removing, washing/cleaning, and reuse of these potentially contaminated materials. Ensure compliant use and location of eyewash station and safety showers.
PERSONAL PROTECTIVE EQUIPMENT (PPE):	
EYE PROTECTION:	Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: chemical splash goggles and/or face shield. If inhalation hazards exist, a full-face respirator may be required.
SKIN PROTECTION:	Personal protective equipment for the body should be selected based on the task being performed, the risks involved, and should be approved by an industrial hygiene specialist before handling this product.
HANDS PROTECTION:	Chemical resistant gloves complying with applicable health and safety standards shall be worn when handling this product. Protective gloves are those made from butyl rubber, nitrile rubber, or polyvinyl alcohol. Appropriate hazard assessments in conjunction with an evaluation of the protection factors of chemical resistant gloves shall be performed to ensure the protective properties remain intact. It is noted that the time to breakdown of protection factors for different glove manufacturers varies. In the case of mixtures, the protection factors of chemical resistant gloves may be impacted and deteriorate at unpredictable rates without understanding the impact of the substance and the specific protection factors of the chemical resistant gloves.
RESPIRATORY PROTECTION:	Ensure adequate ventilation. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product, and the safe working limits of the selected respirator. Ensure the respirator is properly fitted.
ENVIRONMENTAL EXPOSURE CONTROLS:	Dispose of raw and spent materials and wastes in compliance with all local, state, and federal regulations to prevent potential environmental contamination. Industrial air monitoring may be required to determine any potential environmental hazards to the atmosphere. This monitoring may result in the use of engineering and administrative controls such as filtering and scrubbing systems to mitigate or eliminate potential contaminants.

SECTION 9: PHYSICAL & CHEMICAL PROPERTIES

PHYSICAL STATE:	Liquid	**FLASH POINT:**	446°F (230°C)
COLOR:	Dark brown	**AUTO-IGNITION TEMPERATURE:**	Not available
ODOR:	Musty odor	**DECOMPOSITION TEMPERATURE:**	> 400°F (204°C)
ODOR THRESHOLD:	Not available	**EXPLOSIVE LIMITS:**	Not explosive
pH:	Not applicable	**FLAMMABILITY:**	Not available
WATER SOLUBILITY:	Not available	**BOILING POINT:**	Not available
PARTITION COEFFICIENT:	Not available	**BOILING RANGE:**	> 400°F (204°C)
SPECIFIC GRAVITY:	1.25±0.005 g/cc @ 77°F (25°C)	**MELTING/FREEZING POINT:**	Not available
VISCOSITY:	200±50 cps @ 77°F (25°C)	**VAPOR PRESSURE:**	10^{-4} mmHg @ 104°F (40°C)
EVAPORATION RATE:	Not available	**VAPOR DENSITY:**	Not available
VOC:	Not available	**RELATIVE DENSITY:**	10.4±0.05 lbs/gal

SECTION 10: STABILITY & REACTIVITY

STABILITY:	This product is stable under normal conditions. Isocyanates are very reactive compounds and are especially highly reactive toward a large number of compounds with active hydrogens, particularly at high temperatures and in the presence of catalysts. May make brittle many plastic and rubber materials.
INCOMPATIBILITY:	Water reacts slowly, forming carbon dioxide and an inert material comprised of polyureas which could rupture closed containers. 4, 4'- methylene dianiline is formed as in intermediate product in this reaction. At temperatures above 122°F (50°C), the reaction becomes progressively more vigorous. Amines, alcohols, acids, and bases may react violently with generation of heat. Metal compounds (e.g. organotin catalysts) may polymerize with generation of heat and pressure.
HAZARDOUS REACTION:	Polymeric MDI may undergo uncontrolled exothermic polymerization upon contact with incompatible materials or if heated above 347°F-399°F (175-204°C). The resulting pressure build-up could rupture closed containers. May cause some corrosion to copper alloys and aluminum.
CONDITIONS TO AVOID:	Avoid conditions of heat, moisture, and direct sunlight.
HAZARDOUS DECOMPOSITION:	By thermal decomposition and combustion, product may generate carbon monoxide, carbon dioxide, oxides of nitrogen, hydrogen cyanide, dense smoke and irritating or toxic fumes. 4, 4'-methylene dianiline can be formed by reaction of MDI with water.

SECTION 11: TOXICOLOGY INFORMATION

ACUTE HEALTH EFFECTS:

EYE CONTACT:	Causes serious eye irritation. Contact with liquid, mist and aerosols may cause irritation with redness, swelling, pain, and watering of the eyes.
SKIN CONTACT:	Causes skin irritation and may cause allergic skin reaction. Polymeric MDI can cause mild irritation. Skin sensitization, resulting in dermatitis, may occur in some individuals. Application of single doses of 2.5, 3.9, 6.0 and 9.4 mg/kg Polymeric MDI to abraded skin of rabbits, under a cover for 24 hours, caused only minor, local, reversible skin changes.
INHALATION:	May cause allergy or asthma symptoms or breathing difficulties if inhaled. Polymeric MDI has an extremely low vapor pressure and it is difficult to achieve vapor concentrations necessary for inhalation toxicity testing. Symptoms of severe irritation and deaths occurred at 13.6 mg/m^3. Less severe irritation and no deaths occurred at 4.9 mg/m^3. There were no visible effects at 2.2 mg/m^3.
INGESTION:	Swallowing may result in irritation and corrosion of the mouth, throat, and digestive tract.

ACUTE TOXICITY:

COMPONENT NAME	CAS NUMBER	LD_{50} Oral (mg/kg)	LD_{50} Dermal (mg/kg)	LC_{50} Inhalation (mg/m^3/4hrs)
Diphenylmethane 4,4'- diisocyanate	101-68-8	2,200 (mouse)	>10,000 (rabbit)	370 (rat) Aerosol
Polymethylene polyphenylene isocyanate	9016-87-9	>10,000 (rat)	>6,200 (rabbit)	490 (rat) Aerosol

POTENTIAL CHRONIC EFFECTS:

CHRONIC EFFECTS:	Contains material that can cause target organ damage. Once sensitized, a severe allergic reaction may occur when subsequently exposed to very low levels.
TARGET ORGANS:	Long-term, low-level exposure my cause severe, permanent respiratory impairment.
CARCINOGENICITY:	This material does not contain any component that is considered a human carcinogen by the International Agency for Research on Cancer (IARC), American Conference of Governmental Industrial Hygienists (ACGIH), OSHA or the National Toxicology Program (NTP). IARC has concluded that polymeric MDI and MDI are not classifiable as to their carcinogenicity to humans (Group 3). Although lifetime inhalation of PMDI aerosols by rats resulted in a small number of benign adenomas, they are considered to be of unlikely relevance to occupational exposures. Such aerosols are not encountered outside of the experimental laboratory.

MUTAGENICITY:	No known significant effects or critical hazards.
TERATOGENICITY:	No known significant effects or critical hazards.
FERTILITY EFFECTS:	No known significant effects or critical hazards.
DEVELOPMENTAL EFFECTS:	No known significant effects or critical hazards.
MEDICAL CONDITIONS AGGRAVATED BY OVER-EXPOSURE:	Existing respiratory/pulmonary and skin conditions may be aggravated by overexposure.

SECTION 12: ECOLOGICAL INFORMATION

ENVIRONMENTAL EFFECTS:	Based on a review of the individual components, this product has low ecotoxicity on aquatic organisms. When in contact with water an inert non-biodegradable solid will be produced. There is no evidence of bio-accumulation occurring.

SECTION 13: DISPOSAL CONSIDERATION

WASTE DISPOSAL:	By-product wastes or process waste generation should be eliminated and/or minimized when possible. Do not dispose of any contaminants into sanitary sewer systems, storm drains, Publicly Owned Treatment Works (POTW), or any other municipal waste water treatment facility without written approval and agreements for processing wastes with such enterprises. Dispose of raw or unused materials, wastes, and/or by-products in accordance with all applicable local, state, and federal laws. Employ the expertise and knowledge of qualified personnel or contractors in disposal of any and all variants of this product. Ensure material containers are cleaned to the applicable standards before recycling, disposing, or reusing containers. Take special precautions to avoid any cross contamination and potential unknown effects from mixing with other substances. Refer to SECTION 8: EXPOSURE CONTROL/ PERSONAL PROTECTION of this document for personal protection requirements. Disposal to the environment or in violation of environmental protection laws and statutes must be prevented.

SECTION 14: TRANSPORT INFORMATION

PROPER SHIPPING NAME:	
DOT:	Other regulated substance, liquid, n.o.s. (contains: Diphenylmethane 4,4'- diisocyanate) * Single containers less than 5,000 lbs. are not regulated.
TDG:	Not regulated.
IMDG:	Not regulated.
IATA:	Not regulated.

This product could potentially contaminate aquatic and terrestrial environments if not handled in accordance with all precautions, regulations, and laws. Users, transporters, and all other applicable entities must review, follow, and apply any and all necessary precautions and procedures to eliminate and/or minimize potential hazards or risks to aquatic or terrestrial environments.

REGULATORY INFORMATION	UN NUMBER	CLASSES	PG*	LABEL	ADDITIONAL INFORMATION
DOT Classification	NA3082	9	III		**Reportable quantity 5,000 lbs. (2,268 kg)** Single containers less than 5,000 lbs. are not regulated.

*PG: Packaging group

SECTION 15: REGULATORY INFORMATION

U.S. Federal Regulations						
This material is considered hazardous to health under OSHA Hazard Communication Standard (29 CFR 1910.1200)						
HCS Classification:	Irritant Sensitizer					
TSCA 8b Inventory:	All components are listed on the TSCA inventory or are exempt.					
TSCA 5a (2):	No components listed.					
TSCA 5e:	No components listed.					
TSCA 12b:	No components listed.					
Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs):	**COMPONENT**		**CAS NUMBER**		**CONCENTRATION**	
	Diphenylmethane 4,4'-diisocyanate		101-68-8		30-70%	
Clean Air Act - Ozone Depleting Substances (ODS):	This product does not contain nor is it manufactured with ozone depleting substances.					
SARA 313 Form R - Reporting Requirements:	**COMPONENT**		**CAS NUMBER**		**CONCENTRATION**	
	Diphenylmethane 4,4'-diisocyanate		101-68-8		30-70%	
	Polymethylene polyphenyl isocyanate		9016-87-9		30-70%	
SARA 311/312 hazard identification:	Not classified.					
CERCLA Hazardous substances:						
Component	**Concentration**	**Section 302 (TPQ)**	**Section 313**	**Section 304 CERCLA RQ**	**CERCLA reportable quantity**	**Product reportable quantity**
Diphenylmethane 4,4'-diisocyanate	30-70%	Not listed	Listed	Not listed	5,000 lbs	10,000 lbs
STATE REGULATIONS:						
PENNSYLVANIA/NEW JERSEY/MASSACHUSETTS - RTK:	**COMPONENT**		**CAS NUMBER**		**CONCENTRATION**	
	Diphenylmethane 4,4'-diisocyanate		101-68-8		30-70%	
California Prop 65:	This product contains no listed substances known to the State of California to cause cancer, birth defects, or other reproductive harm, at levels which would require a warning under the statute.					
CANADA						
	WHMIS Class D-1A: Immediate and serious toxic effects. WHMIS Class D-2A: Material causing other toxic effects (due to respiratory sensitization).					
CEPA DSL:	All components are listed or exempted.					
This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the SDS contains all the information required by the Controlled Products Regulations.						
INTERNATIONAL LISTS:						
Australia inventory (AICS):	All component substances are present on the inventory of Chemical Substances.					
China inventory (IECSC):	All component substances are present on the Chemical Inventory.					
Japan inventory:	All component substances are present on the inventory- Existing and New Chemical Substances (ENCS). Polymeric MDI 7-872; Methylene diphenyl diisocyanate 4-118.					
Korea inventory:	All component substances are present on the inventory- Existing and Evaluated Chemical Substances. Polymeric MDI KE-21487; Methylene diphenyl diisocyanate KE-23829.					
New Zealand inventory of Chemicals (NZIoC):	All component substances are present on the Chemical Inventory.					

SECTION 16: OTHER INFORMATION

NFPA & HMIS	
4	Extreme
3	Serious
2	Moderate
1	Slight
0	No Hazard

National Fire Protection Association (NFPA)

HEALTH
FLAMMABILITY
REACTIVITY
SPECIAL INFORMATION

Hazardous Material Information System (HMIS)

HEALTH	2
FLAMMABILITY	1
REACTIVITY	1
SPECIAL INFORMATION	

Note: The customer is responsible for determining the PPE code for this material. At the time of publishing, the NFPA/HMIS and the New GHS scale had opposite scales of severity. Check the most recent publications for current information.

Date of Issue:	8/24/2016
Date of previous issue:	
For Your Protection:	The information and recommendations in this publication is to the best of our knowledge, reliable. The toxicity and risk characteristics of products made by Safe Basements LLC will necessarily differ from the toxicity and risk characteristics that occur when such products are used with other materials during a manufacturing process. The resulting risk characteristics should be determined and made known to ultimate end-users and processors. The user is responsible to comply with all applicable federal, provincial or municipal laws and regulations. Safe Basements LLC MAKES NO WARRANTIES OF ANY KIND, EXPRESSED OR IMPLIED, INCLUDING THOSE OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.
Preparation Information:	This SDS supersedes **ALL** previous SDS versions.