

**Section 1. Identification of the substance/mixture and of the company/undertaking****1.1 Product identifier**

Product Form	Mixture
Trade Name	PRE-FORM HB COMP B
Product Code	PFHBB

**1.2 Relevant identified uses of the substance or mixture and uses advised against**

Use Industrial. For professional use only.

**1.2.2 Uses Advised Against**

No additional information available

**1.3 Details of the supplier of the safety data sheet****Manufacturer**

NOX-CRETE, INC.  
1444 SOUTH 20<sup>TH</sup> STREET  
OMAHA, NE 68108  
Tel: 402-341-2080  
Fax: 402-341-9752  
E-Mail: [corporate@nox-crete.com](mailto:corporate@nox-crete.com)  
Web Site: [www.nox-crete.com](http://www.nox-crete.com)

**1.4 Emergency telephone number**

Emergency Number Chemtrec (800) 424-9300  
Chemtrec Outside of U.S. 703-527-3887

**Section 2. Hazards identification****2.1 Classification of the substance or mixture**

Skin Irrit. 2	H315
Skin Sens 1	H317
Eye Irrit. 2B	H320
Acute Tox. 4 (inhalation)	H332
Resp Sens 1	H334
STOT SE 3 Resp Irrit.	H335
STOT RE 1 (Respiratory Tract)	H372

Full text of H phrases see section 16

**Adverse physicochemical, human health and environmental effects**

No additional information available

**2.2 Label elements**

Hazard pictograms



Signal word

Danger

Hazard statements

H315 - Causes skin irritation  
H317 - May cause an allergic skin reaction

H320 - Causes eye irritation  
H332 - Harmful if inhaled  
H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled  
H335 - May cause respiratory irritation  
H372 - Causes damage to organs through prolonged or repeated exposure

**Precautionary statements****Prevention:**

P261 - Avoid breathing dust/fume/gas/mist/vapors/spray  
P264 - Wash exposed area's 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  
P285 - In case of inadequate ventilation wear respiratory protection. The type of respiratory protection selected must comply with the requirements set forth in OSHA's Respiratory Protection Standard (29 CFR 1910.134) or regional standards. See section 8 of the SDS for additional details.

**Response:**

P302+P352 - IF ON SKIN: Wash with plenty of soap and water  
P304+P341 - IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.  
P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses if present and easy to do so - continue rinsing  
P314 - Get Medical advice/attention if you feel unwell  
P333+P313 - If skin irritation or rash occurs: Get medical advice/attention  
P337+P313 - If eye irritation persists: Get medical advice/attention  
P342+P311 - If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician

**Storage:**

P362 - Take off contaminated clothing and wash before reuse.  
P403+P233 - Store in a well ventilated place. Keep container tightly closed.

**Disposal:**

P405 - Store locked up..  
P501 - Dispose of contents/container in accordance with local/regional/national/international regulations.

**2.3 Other hazards**

None known

Full text of H and P phrases: see section 16

**Section 3. Composition / information on ingredients**

**3.1 Substances**

Not applicable

**3.2 Mixture**

Name	Product identifier	%
Polymeric Diphenylmethane Diisocyanate	9016-87-9	Trade Secret
4,4'- Diphenylmethane Diisocyanate	101-68-8	Trade Secret
Diphenylmethane Diisocyanate Mixed Isomers	78-93-3	Trade Secret

Pursuant to 29CFR 1910.1200(i) the specific chemical identity (and / or) concentration may be withheld as Trade Secret, while all health and safety properties and effects are included in the SDS. Balance of other ingredients are non-hazardous or less than 1% in concentration (or 0.1% for carcinogens, reproductive toxins, or respiratory sensitizers).

**Section 4. First aid measures****4.1 Description of first aid measures****First-aid measures general**

Get medical advice/attention if you feel unwell. Never give anything by mouth to an unconscious person.

**First-aid measures after inhalation**

Move to an area free from further exposure. Extreme asthmatic reactions that may occur in sensitized persons. Can be life threatening. Get medical attention immediately. Administer oxygen or artificial respiration as needed. Asthmatic symptoms may develop and may be immediate or delayed up to several hours.

**First-aid measures after skin contact**

If skin irritation persists, seek medical attention. Remove or take off immediately all contaminated clothing. Rinse skin with water or shower. Wash off immediately with soap and plenty of water. Get medical attention if irritation develops.

**First-aid measure after eye contact**

When contact lenses are worn, remove if possible. In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Use lukewarm water if possible. Use fingers to ensure that eyelids are separated and that the eye is being irrigated. Get medical attention.

**First-aid measures after ingestion**

Rinse mouth. DO NOT induce vomiting. Get medical attention immediately.

**4.2 Most important symptoms and effects, acute and delayed****Symptoms/injuries after inhalation**

**Acute:** Diisocyanate vapors or mist at concentrations above the TLV or PEL can irritate (burning sensation) the mucous membranes in the respiratory tract (nose, throat, lungs) causing runny nose, sore throat, coughing, chest discomfort, shortness of breath and reduced lung function (breathing obstruction). Persons with a preexisting, nonspecific bronchial hyperreactivity can respond to concentrations below the TLV or PEL with similar symptoms as well as asthma attack or asthma-like symptoms. Exposure well above the TLV or PEL may lead to bronchitis, bronchial spasm and pulmonary edema (fluid in lungs). Chemical or hypersensitivity pneumonitis, with flu-like symptoms (e.g., fever, chills), has also been reported. These symptoms can be delayed up to several hours after exposure. These effects are usually reversible.

<b>Symptoms/injuries after skin contact</b>	Causes skin irritation with symptoms of reddening, itching, and swelling. Persons previously sensitized can experience allergic skin reaction with symptoms of reddening, itching, swelling, and rash. Cured material is difficult to remove. Contact with MDI can cause discoloration.
<b>Symptoms/injuries after eye contact</b>	Causes eye irritation with symptoms of reddening, tearing, stinging, and swelling. May cause temporary corneal injury. Vapor or aerosol may cause irritation with symptoms of burning and tearing.
<b>Symptoms/injuries after ingestion</b>	May cause irritation of the digestive tract. Symptoms may include abdominal pain, nausea, vomiting, and diarrhea.

**4.3 Indication of any immediate medical attention and special treatment needed**

No additional information available

**Section 5. Firefighting measures****5.1 Extinguishing media****Suitable extinguishing media**

Dry chemical, foam, carbon dioxide

**Unsuitable extinguishing media**

If water is used it should be in very large quantities. The reaction between hot isocyanate and water may be vigorous.

**5.2 Special hazards arising from the substance or mixture****Reactivity**

Thermal decomposition products may cause a health hazard.

**5.3 Advice for firefighters****Firefighting instructions**

Flammable Liquid! This material releases vapors when heated above ambient temperatures. Vapors can cause a flash fire.

**Protective equipment for firefighters**

Firefighters should always wear self-contained breathing apparatus (SCBA) and full protective gear when fighting any chemical fire.

**Other information**

On heating or burning harmful gasses/vapors may be released.

**Section 6. Accidental release measures****6.1 Personal precautions, protective equipment and emergency procedures****General measures**

Implement site emergency response plan. Evacuate non-emergency personnel. The magnitude of the evacuation depends upon the quantity released, site conditions, and the ambient temperature. Isolate the area and prevent access of unauthorized personnel. Notify management. Call CHEMTREC at 1-800-424-9300 for assistance and advice.

**6.11 Protective Equipment**

Wear necessary personal protective equipment (PPE) as specified in the SDS or the site emergency response plan.

**6.2 Environmental precautions**

Prevent entry to sewers and public waters.

Notify authorities if liquid enters sewers or public waters.

**6.3 Methods and materials for containment and cleaning up****Methods for cleaning up**

Ventilate and remove ignition sources. Control the source of the leak. Contain the released material by damming, diking, retaining, or diverting into an appropriate containment area. Absorb or pump off as much of the spilled material as possible. When using absorbent, completely cover the spill area with suitable absorbent material (e.g., vermiculite, kitty litter, Oil-Dri®, etc...). Allow for the absorbent material to absorb the spilled liquid. Shovel the absorbent material into an approved metal

container (i.e., 55-gallon salvage drum). Do not fill the container more than 2/3 full to allow for expansion, and do not tighten the lid on the container. Repeat application of absorbent material until all liquid has been removed from the surface.

Decontaminate the spill surface area using a neutralization solution (see list of solutions on the SDS); scrubbing the surface with a broom or brush helps the decontamination solution to penetrate into porous surfaces. Wait at least 15 minutes after first application of the neutralization solution. Cover the area with absorbent material and shovel this into an approved metal container. Check for residual surface contamination using Swype® test kits, available from Colorimetric Laboratories, Inc. (CLI) at 847-803-3737. If the Swype® test pad demonstrates that isocyanate remains on the surface (red color on pad), repeat applications of neutralization solution, with scrubbing, followed by absorbent until the surface is decontaminated (no color change on Swype® pad). Apply lid loosely to metal waste container (do not tighten the lid because carbon dioxide gas and heat can be generated from the neutralization process). With the lid still loosely in place, move the container to an isolated, well-ventilated area to allow release of carbon dioxide. After 72 hours, seal the container, and properly dispose of the waste material and any contaminated equipment (i.e., broom or brush) in accordance with existing federal, state and local regulations.

Products or mixtures that have been shown to be effective neutralization solutions for decontaminating surfaces, tools or equipment that have been in contact with an isocyanate includes:

A mixture of 80 % water, 20 % non-ionic surfactant (e.g. Plurafac SL-62, Tergitol TMN-10).

The following products can be obtained through retail outlets:

ZEP® Commercial Heavy Duty Floor Stripper

Greased Lightning® Super Strength Cleaner and Degreaser

EASY OFF® Grill and Oven Cleaner

EASY OFF® Fume Free Oven Cleaner

## Section 7. Handling and storage

### 7.1 Precautions for safe handling

#### Protective measures

Wash hands and other exposed areas with soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in work areas to prevent formation of vapor. When not in use keep containers tightly closed. Avoid breathing vapor or mist.

#### Hygiene measures

Wash contaminated clothing before reuse.

### 7.2 Conditions for safe storage, including any incompatibilities

#### Storage conditions

Store in accordance with local regulations. Store in original container in a cool well ventilated place away from heat, sparks and open flame.. Keep containers tightly closed until ready for use.

#### Incompatible materials

Water, Amines, Strong bases, Alcohols, Copper alloys. Some reactions can be violent.

#### Storage temperature

Store in a cool dry environment away from sources of ignition.

## Section 8. Exposure controls/personal protection

**8.1 Control parameters****Occupational exposure limits**

<b>Ingredient name</b>	<b>Occupational exposure limits ACGIH TLV (United States)</b>
4,4'- Diphenylmethane Diisocyanate	TWA: .005 ppm 8 hours

**8.2 Exposure controls****Appropriate engineering controls**

Use with adequate ventilation to keep product vapor concentrations below specified TLV

**Eye and face protection**

Chemical goggles and/or face shields are recommended to prevent potential eye contact, irritation or injury.

**Skin protection**

Wear chemical resistant gloves and appropriate protective clothing and boots as required to prevent skin contact. Wash exposed skin frequently with soap and water. Soiled clothing should be laundered before reuse.

**Respiratory protection**

Avoid breathing the product mist or vapors. The use of a NIOSH approved positive air supplied respirator is recommended whenever the airborne concentrations exceed the specified TLV or there is a high concentration of product in the air such as created by spraying the product. Air purifying (cartridge type) respirators are not approved for protection against diisocyanates.

**Section 9. Physical and chemical properties****9.1 Information on basic physical and chemical properties**

<b>Appearance</b>	Dark brown
<b>Odor</b>	Musty
<b>Odor Threshold</b>	No data available
<b>PH</b>	No data available
<b>Melting point</b>	No data available
<b>Freezing point</b>	No data available
<b>Boiling point</b>	208 C (406 F)
<b>Flash point</b>	199 C 390 F
<b>Relative evaporation rate (butyl acetate=1)</b>	No data available
<b>Flammability (solid, gas)</b>	No data available
<b>Upper/lower explosive limits</b>	No data available
<b>Vapor pressure</b>	<0.0001 mm Hg @ 25 C
<b>Vapor density</b>	No data available
<b>Relative density (Specific gravity)</b>	1.24 Kg per Liter 10.35 Lbs per Gallon
<b>Solubility</b>	Reacts with water
<b>Partition coefficient n-octanol/water</b>	No data available
<b>Auto-ignition temperature</b>	No data available
<b>Viscosity</b>	No data available
<b>VOC content</b>	No data available

**Section 10. Stability and reactivity****10.1 Reactivity**

Reacts with water

**10.2 Chemical stability**

Stable under normal conditions

**10.3 Possibility of hazardous reactions**

Hazardous polymerization will not occur.

**10.4 Conditions to avoid**

Extreme high or low temperatures.



According to Regulation 29 CFR 1910.1200, Regulation (EC) No. 1272/2008 (CLP)(GHS), *Hazardous Products Regulation (HPR)* (WHMIS 2015)**10.5 Incompatible materials**

Water, Amines, Strong bases, Alcohols, Copper alloys

**10.6 Hazardous decomposition products**

Carbon monoxide, Carbon dioxide, Nitrogen oxides, Isocyanate, Other undetermined compounds.

**Section 11. Toxicology information****11.1 Information on toxicological effects****Acute toxicity**

No data available

**Irritation/Corrosion Skin**

May cause skin irritation or sensitization.

**Eyes**

May cause serious eye irritation and damage.

**Respiration or skin sensitization**

May cause respiratory irritation or sensitization.

**Germ cell mutagenicity**

No data available

**Carcinogenicity****IARC**

Polymeric MDI

3

3 - Inadequate in humans and inadequate or limited in animals.

**Reproductive toxicity**

No data available.

**Specific target organ toxicity****Single exposure**

No data available

**Repeated exposure**

No data available

**Aspiration hazard**

No data available

**Section 12. Ecological information****12.1 Ecotoxicity**

Not established

**12.2 Persistence and degradability**

Not established

**12.3 Bioaccumulative potential**

Not established

**12.4 Mobility in soil**

No additional information available

**12.5 Other adverse effects**

Avoid release to the environment

**SECTION 13. Disposal Considerations****13.1 Waste treatment methods**

The user of this material has the responsibility to dispose of unused material, residues and containers in compliance with all applicable local, state and federal laws and regulations regarding treatment, storage and disposal for hazardous and nonhazardous wastes.

**SECTION 14. Transport information**

In accordance with ADR / RID / ADNR / IMDG / ICAO / IATA

**14.1 UN number****14.2 UN proper shipping name****14.3 Transport hazard class(es)****14.4 Packing group****14.5 Environmental hazards**

No additional information available

**14.6 Special precautions for user****14.7 Transport in bulk according to****Annex II of MARPOL 73/78 and the IBC Code**

No additional information available

**14.8 Transport in bulk according to****CFR 49 173.15**

Not applicable

**SECTION 15. Regulatory information****15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture****15.1.2 USA Regulations****Section 313**

Contains the following ingredients at or above the reporting level requirements of Section 313. This information must be included in all SDS's copied or distributed for this material.

CHEMICAL	CAS #	MAX WEIGHT %
Polymeric Diphenylmethane Diisocyanate	9016-87-9	50
4,4'- Diphenylmethane Diisocyanate	101-68-8	40

**TSCA****Proposition 65**

All ingredients are listed or exempted  
To the best of our knowledge, this product does not contain any of the listed chemicals, which the state of California has found to cause cancer, birth defects or other reproductive harm.

**15.1.3 Canada Regulations**

This SDS has been prepared according to the hazard criteria of the *Hazardous Products Regulation* (HPR) (WHMIS 2015) and the SDS contains all of the information required by the HPR.

**DSL****15.2 Chemical safety assessment**

All ingredients are listed or exempted  
A Chemical Safety Assessment has not been carried out.

**Section 16. Other information**

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Version	2.2
Number	146
Date of previous issue	3-22-2016
Preparer	Nox-Crete, Inc.
<u>Reference Documentation</u>	

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**Full text of H and P phrases**

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H315 - Causes skin irritation

H317 - May cause an allergic skin reaction

H320 - Causes eye irritation

H332 - Harmful if inhaled

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

H335 - May cause respiratory irritation

H372 - Causes damage to organs through prolonged or repeated exposure

P261 - Avoid breathing dust/fume/gas/mist/vapors/spray

P264 - Wash exposed areas 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

P285 - In case of inadequate ventilation wear respiratory protection

P302+P352 - If on skin: Wash with plenty of soap and water.

P304+P341 - IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

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P314 - Get Medical advice/attention if you feel unwell

P333+P313 - If skin irritation or rash occurs: Get medical advice/attention

P337+P313 - If eye irritation persists: Get medical advice/attention

P362 - Take off contaminated clothing and wash it before reuse.

P342+P311 - If experiencing respiratory symptoms: Call a POISON CENTER or doctor/physician

P403+P233 - Store in a well ventilated place. Keep container tightly closed.

P405 - Store locked up.

P501 - Dispose of contents/container in accordance with local/regional/national/international regulations