



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

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 20TH STREET
 OMAHA, NE 68108
 Tel: 402-341-2080
 Fax: 402-341-9752
 E-Mail: corporate@nox-crete.com
 Web Site: www.nox-crete.com

1.4 Emergency telephone number

Emergency Number	Chemtrec (800) 424-9300 Chemtrec Outside of U.S. 703-527-3887
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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 physiochemical, human health and environmental effects

No additional information available

2.2 Label elements

Hazard pictograms



Signal word Danger

Hazard statements H315 - Causes skin irritation



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

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



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

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.

Symptoms/injuries after skin contact

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.

Symptoms/injuries after eye contact

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.

Symptoms/injuries after ingestion

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

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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 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.

Wash contaminated clothing before reuse.

Hygiene measures

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.

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

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

Ingredient name	Occupational exposure limits ACGIH TLV (United States)
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

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

Section 10. Stability and reactivity



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

<u>10.1 Reactivity</u>	Reacts with water
<u>10.2 Chemical stability</u>	Stable under normal conditions
<u>10.3 Possibility of hazardous reactions</u>	Hazardous polymerization will not occur.
<u>10.4 Conditions to avoid</u>	Extreme high or low temperatures.
<u>10.5 Incompatible materials</u>	Water, Amines, Strong bases, Alcohols, Copper alloys
<u>10.6 Hazardous decomposition products</u>	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	May cause skin irritation or sensitization.
Skin	
Eyes	May causes 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
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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

<u>12.1 Ecotoxicity</u>	Not established
<u>12.2 Persistence and degradability</u>	Not established
<u>12.3 Bioaccumulative potential</u>	Not established
<u>12.4 Mobility in soil</u>	No additional information available
<u>12.5 Other adverse effects</u>	Avoid release to the environment

SECTION 13. Disposal Considerations

<u>13.1 Waste treatment methods</u>	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.
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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)**

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

Polymeric Diphenylmethane Diisocyanate
4,4'- Diphenylmethane Diisocyanate

CAS #

9016-87-9
101-68-8

MAX WEIGHT %

50
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

Date of issue 7-17-2023
Version 23.0
Number 146
Date of previous issue 7-23-2020
Preparer Nox-Crete, Inc.
Reference Documentation

The information and recommendations contained herein are, to the best of Nox-Crete, Inc.'s knowledge and belief, accurate and reliable as of the date issued. You can contact Nox-Crete, Inc. to ensure that this document is the most current available from Nox-Crete, Inc. The information and recommendations are offered for the buyer's/user's consideration and examination. It is the buyer's/user's responsibility to satisfy themselves that the product is suitable for the intended use. Appropriate warnings and safe-handling procedures should be provided to all handlers and users. Since conditions for use of the product are not under the control of the manufacturer, it is the buyer's/user's duty to determine the conditions necessary for the safe use of this product. Since the information provided herein may have been obtained in part from independent laboratories or other sources not under our direct supervision, no representation is made that the information is accurate, reliable, complete or representative and buyer/user may rely thereon only at their risk. We have made no effort to censor or to conceal deleterious aspects of this product. Further, since we cannot anticipate or control the many different conditions under which this information or our products may be used, we make no guarantee that the health and/or safety precautions we have suggested will be adequate for all individuals and /or situations involving its



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handling or use. Likewise, we make no guarantee or warranty of any kind that the use or disposal of this product is in compliance with all federal, state or local laws. It is the obligation of each buyer/user of the product mentioned herein to determine and comply with the requirements of all applicable statutes. If buyer/user repackages this product, it is the buyer's/user's responsibility to ensure proper health, safety and other necessary information is included with and/or on the container. Nox-Crete, Inc. urges each customer or recipient of this SDS to study it carefully and consult appropriate expertise, as necessary or appropriate, to become aware of and understand the data contained in this SDS and any hazards associated with this product. Alteration of this document is strictly prohibited. Except to the extent required by law, re-publication or retransmission of this document, in whole or in part is not permitted.

Full text of H and P phrases

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Skin Sens 1	H317
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STOT SE 3 Resp Irrit.	H335
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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.

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

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