

SAFETY DATA SHEET**Foster® 81-84B**

Version 1.1

Revision Date 12/06/2021

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Foster® 81-84B
Product code : 100000015355

Manufacturer or supplier's details

Company : H.B. Fuller Construction Products

Address : 1105 South Frontenac
Aurora, IL, 60504

Telephone : 1-800-552-6225

Medical Emergency Phone Number (24 Hours): 1-888-853-1758

Transport Emergency Phone Number (CHEMTREC): 1-800-424-9300

Recommended use of the chemical and restrictions on use

Recommended use : Curing agent

Restrictions on use : For industrial use only.

SECTION 2. HAZARDS IDENTIFICATION**Emergency Overview**

Appearance	liquid
Color	brown
Odor	characteristic

GHS Classification

Acute toxicity (Inhalation) : Category 3
Skin irritation : Category 2
Eye irritation : Category 2A
Respiratory sensitization : Category 1
Skin sensitization : Category 1
Specific target organ toxicity - single exposure : Category 3 (Respiratory system)
Specific target organ toxicity - repeated exposure : Category 2
Specific target organ toxicity - repeated exposure (Inhalation) : Category 2 (Respiratory Tract)

GHS label elements

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Hazard pictograms : 

Signal Word : Danger

Hazard Statements:

H315 Causes skin irritation. H317 May cause an allergic skin reaction. H319 Causes serious eye irritation. H331 Toxic if inhaled. H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled. H335 May cause respiratory irritation. H373 May cause damage to organs through prolonged or repeated exposure. H373 May cause damage to organs (Respiratory Tract) through prolonged or repeated exposure if inhaled.

Precautionary Statements:

Prevention: P260 Do not breathe dust/ fume/ gas/ mist/ vapors/ spray. P264 Wash skin thoroughly after handling. P271 Use only outdoors or in a well-ventilated area. P272 Contaminated work clothing must not be allowed out of the workplace. P280 Wear protective gloves/ eye protection/ face protection. P285 In case of inadequate ventilation wear respiratory protection.

Response: P302 + P352 IF ON SKIN: Wash with plenty of soap and water. P304 + P340 + P311 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor. P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. 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/ doctor. P362 Take off contaminated clothing and wash before reuse.

Storage: P403 + P233 Store in a well-ventilated place. Keep container tightly closed. P405 Store locked up.

Disposal: P501 Dispose of contents/ container to an approved waste disposal plant.

Potential Health Effects

Inhalation : Vapors/fumes may be irritating at application temperatures.

Skin : Contact with hot product will cause thermal burns.

Aggravated Medical Condition : None known.

Carcinogenicity:

IARC No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA No component of this product present at levels greater than or equal to 0.1% is on OSHA's list of regulated carcinogens.

NTP No ingredient of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

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Hazardous ingredients

Chemical name	CAS-No.	Concentration [%]
4,4'-methylenediphenyl diisocyanate	101-68-8	50 - 70
Polymethylene polyphenyl isocyanate	9016-87-9	50 - 70
methylenediphenyl diisocyanate	26447-40-5	30 - 50

Actual concentration is withheld as a trade secret

SECTION 4. FIRST AID MEASURES

- General advice : Show this material safety data sheet to the doctor in attendance.
- If inhaled : Move to fresh air.
If symptoms persist, call a physician.
- In case of skin contact : Wipe molten product from skin as much as possible. Allow product to cool. Do not peel solidified product from skin.
Loosen product from skin with mineral oil and mild abrasion.
- In case of eye contact : In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
- If swallowed : Do not induce vomiting. Seek medical attention if symptoms develop. Provide medical care provider with this SDS.
- Notes to physician : Use mineral oil to soften and loosen product for removal.

SECTION 5. FIRE-FIGHTING MEASURES

- Suitable extinguishing media : Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
- Unsuitable extinguishing media : Do NOT use water jet.
- Specific hazards during fire fighting : Burning produces irritant fumes.
- Special protective equipment for fire-fighters : Wear self-contained breathing apparatus for firefighting if necessary.

SECTION 6. ACCIDENTAL RELEASE MEASURES

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Personal precautions, protective equipment and emergency procedures : Refer to protective measures listed in sections 7 and 8.

Methods and materials for containment and cleaning up : Allow to solidify.
Scrape up.
Shovel into suitable container for disposal.

SECTION 7. HANDLING AND STORAGE

Advice on safe handling : No special precautions are needed in handling this material. Avoid breathing vapors/fumes of heated product. Prevent contact with molten product.

Conditions for safe storage : Keep in a dry, cool place.

Materials to avoid : No special restrictions on storage with other products.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Ingredients with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
4,4'-methylenediphenyl diisocyanate	101-68-8	TWA	0.005 ppm	ACGIH
		C	0.02 ppm 0.2 mg/m ³	OSHA Z-1
		C	0.02 ppm 0.2 mg/m ³	OSHA P0
		PEL	0.005 ppm 0.051 mg/m ³	CAL PEL

Engineering measures : At the application temperature, use of local exhaust over the premelting reservoir is encouraged.

Personal protective equipment

Respiratory protection : In case of insufficient ventilation, wear suitable respiratory equipment.

Filter type : Combined particulates and organic vapor type

Hand protection
Material : Nitrile rubber

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Remarks : When handling hot material, use heat resistant gloves.
Eye protection : Safety glasses

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance : liquid
Color : brown
Odor : characteristic
Odor Threshold : no data available
pH : not applicable
Boiling point/boiling range : is not determined
Flash point : 200 °C
not applicable
Evaporation rate : is not determined
Flammability (solid, gas) : Not classified as a flammability hazard

Upper explosion limit : Upper flammability limit
is not determined
Lower explosion limit : Lower flammability limit
is not determined
Vapor pressure : is not determined
Relative vapor density : is not determined
Density : 10.3 lb/gal
Solubility(ies)
Water solubility : insoluble
Partition coefficient: n-
octanol/water : no data available
Autoignition temperature : is not determined
Thermal decomposition : Carbon monoxide, carbon dioxide and unburned
hydrocarbons (smoke).

Viscosity
Viscosity, kinematic : not applicable

SECTION 10. STABILITY AND REACTIVITY

Reactivity : Container can be pressurized by carbon dioxide due to
reaction with humid air and/or water.
Chemical stability : The product is chemically stable.
Possibility of hazardous : Hazardous polymerization does not occur.

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reactions

Hazardous decomposition products : In case of incomplete combustion an increased formation of oxides of nitrogen (NO_x) is to be expected.
Thermal decomposition can lead to release of irritating gases and vapors.
Humid air and/or water will produce carbon dioxide which will pressurize the container.
Stable under normal conditions.

SECTION 11. TOXICOLOGICAL INFORMATION**Acute toxicity****Product:**

Acute inhalation toxicity : Acute toxicity estimate : 1 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist
Method: Calculation method

Components:**4,4'-methylenediphenyl diisocyanate:**

Acute inhalation toxicity : LC50 : 1.5 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist

Polymethylene polyphenyl isocyanate:

Acute inhalation toxicity : LC50 Rat: 0.49 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist

methylenediphenyl diisocyanate:

Acute inhalation toxicity : LC50 Rat: 0.369 mg/l
Exposure time: 4 h
Test atmosphere: dust/mist

Skin corrosion/irritation

No data available

Serious eye damage/eye irritation

No data available

Respiratory or skin sensitization

No data available

Germ cell mutagenicity

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No data available

Carcinogenicity

No data available

Reproductive toxicity

No data available

STOT-single exposure

No data available

STOT-repeated exposure

No data available

Aspiration toxicityNo data available

SECTION 12. ECOLOGICAL INFORMATION**Ecotoxicity**

No data available

Persistence and degradability

No data available

Bioaccumulative potential**Mobility in soil**

No data available

Other adverse effectsNo data available

SECTION 13. DISPOSAL CONSIDERATIONS**Disposal methods**

Waste from residues

: To the best of our knowledge, this product does not meet the definition of hazardous waste under the U.S. EPA Hazardous Waste Regulations 40 CFR 261. Dispose of in an approved landfill. Consult your state, local or provincial authorities and your local waste vendor for more restrictive requirements. The hazard and precautionary statements displayed on the label also apply to any residues left in the container.

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SECTION 14. TRANSPORT INFORMATION**International Regulations****UNRTDG**

Not regulated as a dangerous good

IATA-DGR

Not regulated as a dangerous good

IMDG-Code

Not regulated as a dangerous good

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

Domestic regulation**49 CFR**

Not regulated as a dangerous good

SECTION 15. REGULATORY INFORMATION

SARA 311/312 Hazards : Acute toxicity (any route of exposure)
Respiratory or skin sensitization
Specific target organ toxicity (single or repeated exposure)
Skin corrosion or irritation
Serious eye damage or eye irritation

SARA 302 : This material does not contain any components with a section 302 EHS TPQ.

SARA 313 : The following components are subject to reporting levels established by SARA Title III, Section 313:

Polymethylene polyphenyl isocyanate	9016-87-9
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Clean Air Act

The following chemical(s) are listed as HAP under the U.S. Clean Air Act, Section 112 (40 CFR 61):

4,4'-methylenediphenyl diisocyanate	101-68-8
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This product does not contain any chemicals listed under the U.S. Clean Air Act Section 112(r) for Accidental Release Prevention (40 CFR 68.130, Subpart F).

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The following chemical(s) are listed under the U.S. Clean Air Act Section 111 SOCM I Intermediate or Final VOC's (40 CFR 60.489):

US State Regulations

California Prop 65 : Please contact Supplier for more information.

The ingredients of this product are reported in the following inventories:

TSCA	All substances listed as active on the TSCA inventory
DSL	All components of this product are on the Canadian DSL
AICS	On the inventory, or in compliance with the inventory
ENCS	On the inventory, or in compliance with the inventory
KECI	On the inventory, or in compliance with the inventory
PICCS	On the inventory, or in compliance with the inventory
IECSC	On the inventory, or in compliance with the inventory
TCSI	On the inventory, or in compliance with the inventory

Inventories Legend TSCA (USA), DSL (Canada), REACH(Europe), AIIIC (Australia), NZIoC (New Zealand), ENCS (Japan), KECI (Korea), PICCS (Philippines), IECSC (China), TWINV (Taiwan)

SECTION 16. OTHER INFORMATION

Prepared by: Global Regulatory Office - phone: 1-651-236-5842 - email: msds.request@hbfuller.com

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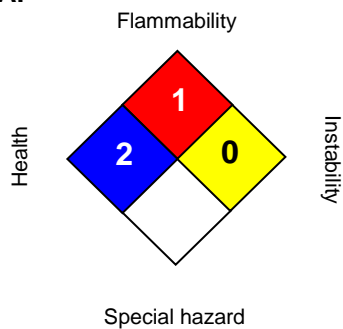
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Further information

NFPA:



HMIS III:

HEALTH	2*
FLAMMABILITY	1
PHYSICAL HAZARD	0

0 = not significant, 1 =Slight,
 2 = Moderate, 3 = High
 4 = Extreme, * = Chronic

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