

SAFETY DATA SHEET**PARABOND® MILLENNIUM SERIES EMC 4011**

Version 1.0

Revision Date 06/10/2022

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : PARABOND® MILLENNIUM SERIES EMC 4011
Product code : 100000012015

Manufacturer or supplier's details

Company : H.B. Fuller Company
Address : 1200 Willow Lake Boulevard
Vadnais Heights, MN 55110
Telephone : 1-888-423-8553

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 : Isocyanate based product
Restrictions on use : For industrial use only.


SECTION 2. HAZARDS IDENTIFICATION**Emergency Overview**

Appearance	paste
Color	brown
Odor	characteristic

GHS Classification

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

GHS label elements

Hazard pictograms : 

Signal Word : Danger

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Hazard Statements:

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

Precautionary Statements:

Prevention: P260 Do not breathe mist or vapors. P264 Wash skin thoroughly after handling. 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 + P341 IF INHALED: If breathing is difficult, remove person to fresh air and keep 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. 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.

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

Potential Health Effects

Aggravated Medical Condition : None known.
Symptoms of Overexposure : Breathing difficulties

Carcinogenicity:**IARC**

Group 1: Carcinogenic to humans During normal handling of the product, this substance is encapsulated within the product and will not present a cancer exposure risk.

Quartz (SiO₂) 14808-60-7

Group 1: Carcinogenic to humans

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

Known to be human carcinogen During normal handling of the product, this substance is encapsulated within the product and will not present a cancer exposure risk.

Quartz (SiO₂) 14808-60-7

Known to be human carcinogen

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Hazardous ingredients

This product contains one or more materials that may be hazardous when present as an airborne dust. During normal handling of the product, the material is encapsulated within the product and will not present an exposure risk. Once the product has reached its final state and is abraded or

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disturbed, dusting and exposure may occur. This product may contain crystalline silica. As provided, and during normal use of this product, the crystalline silica is encapsulated within the product. As such, it is considered to be inextricably bound, and not readily available for exposure. Use of this product would not subject the user to the compliance requirements of 29CFR1910.1053 or 1926.1153.

Limestone	1317-65-3	50 - 70
Isocyanate Based Polymer	9048-57-1	10 - 20
Sodium borosilicate	50815-87-7	1 - 5
4,4'-methylenediphenyl diisocyanate	101-68-8	1 - 5
calcium carbonate	471-34-1	1 - 5
p-toluenesulphonyl isocyanate	4083-64-1	1 - 5
4,4'-Methylenediphenyl diisocyanate, oligomers	25686-28-6	0.1 - 1
Isocyanic acid, polymethylenepolyphenylene ester, polymer with .alpha.-hydro-.omega.-hydroxypoly(oxy-1,2-ethanediyl)	57636-09-6	0.1 - 1
Quartz (SiO ₂)	14808-60-7	0.1 - 1

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 : Get medical attention if irritation develops and persists.
Take off contaminated clothing and shoes immediately.
Wash contaminated clothing before re-use.
- 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. If conscious, give 2 glasses of water.
Get immediate medical attention.
- Most important symptoms and effects, both acute and delayed : Breathing difficulties

SECTION 5. FIRE-FIGHTING MEASURES

- Suitable extinguishing media : Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
- Specific hazards during fire fighting : Burning produces irritant fumes.

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Special protective equipment for fire-fighters : In the event of fire, wear self-contained breathing apparatus. Use personal protective equipment.

SECTION 6. ACCIDENTAL RELEASE MEASURES

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 : Soak up with inert absorbent material. Shovel into suitable container for disposal. Neutralize with the following product(s): Ammonia

SECTION 7. HANDLING AND STORAGE

Local/Total ventilation : Use only with adequate ventilation.

Advice on safe handling : Protect from moisture. Avoid inhalation, ingestion and contact with skin and eyes.

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
Limestone	1317-65-3	TWA (Respirable)	5 mg/m ³	NIOSH REL
		TWA (total)	10 mg/m ³	NIOSH REL
		TWA (Respirable)	5 mg/m ³	NIOSH REL
		TWA (total)	10 mg/m ³	NIOSH REL
		TWA (Respirable)	5 mg/m ³	NIOSH REL
		TWA (total)	10 mg/m ³	NIOSH REL
		TWA (total dust)	15 mg/m ³	OSHA Z-1
		TWA (respirable fraction)	5 mg/m ³	OSHA Z-1
		TWA (Total)	15 mg/m ³	OSHA P0

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		TWA (Respirable fraction)	5 mg/m ³	OSHA P0
		TWA (Total dust)	15 mg/m ³	OSHA P0
		TWA (respirable dust fraction)	5 mg/m ³	OSHA P0
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
calcium carbonate	471-34-1	PEL (Total dust)	10 mg/m ³	CAL PEL
		PEL (respirable dust fraction)	5 mg/m ³	CAL PEL
Quartz (SiO ₂)	14808-60-7	TWA (Respirable particulate matter)	0.025 mg/m ³	ACGIH
		TWA (total dust)	30 mg/m ³ / %SiO ₂ +2	OSHA Z-3
		TWA (respirable)	10 mg/m ³ / %SiO ₂ +2	OSHA Z-3
		TWA (respirable)	250 mppcf / %SiO ₂ +5	OSHA Z-3
		TWA (Respirable fraction)	0.1 mg/m ³	OSHA P0
		TWA (Respirable dust)	0.05 mg/m ³	OSHA Z-1
		PEL (Respirable dust)	0.05 mg/m ³	CAL PEL
		TWA (respirable dust fraction)	0.1 mg/m ³	OSHA P0

Engineering measures : Use local exhaust ventilation or other engineering controls to minimize exposures.

Personal protective equipment

Respiratory protection : Use respiratory protection unless adequate local exhaust ventilation is provided or exposure assessment demonstrates

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that exposures are within recommended exposure guidelines.

Hand protection	
Material	: Nitrile rubber
Eye protection	: Safety glasses with side-shields
Hygiene measures	: Avoid contact with skin, eyes and clothing. Provide adequate ventilation.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: paste
Color	: brown
Odor	: characteristic
Odor Threshold	: no data available
pH	: not applicable
Melting point/freezing point	: is not determined
Initial boiling point and boiling range	: is not determined
Flash point	: 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
Density	: 1.27 g/cm ³
Solubility(ies)	
Water solubility	: is not determined
Partition coefficient: n-octanol/water	: no data available
Autoignition temperature	: is not determined
Viscosity	
Viscosity, kinematic	: is not determined

SECTION 10. STABILITY AND REACTIVITY

Reactivity	: Container can be pressurized by carbon dioxide due to reaction with humid air and/or water.
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Chemical stability	:	The product is chemically stable.
Possibility of hazardous reactions	:	Hazardous polymerization does not occur.
Incompatible materials	:	Amines Strong acids and strong bases
Hazardous decomposition products	:	Stable under normal conditions.

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

Acute inhalation toxicity : Acute toxicity estimate : 72.86 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

p-toluenesulphonyl isocyanate:

Acute inhalation toxicity : LC50 Rat: > 640 ppm
Exposure time: 1 h
Test atmosphere: vapor

4,4'-Methylenediphenyl diisocyanate, oligomers:

Acute inhalation toxicity : LC50 : 1.5 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

No data available

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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. Disposal via incineration at an approved facility is recommended, as industry best practice. Consult state, local or provincial authorities for more restrictive requirements.

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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 : 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 : This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

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

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).

US State Regulations

California Prop 65 Please contact Supplier for more information.

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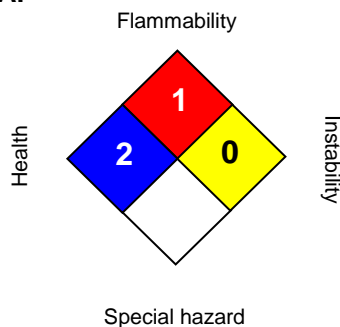
The ingredients of this product are reported in the following inventories:

TSCA	All substances listed as active on the TSCA inventory
TSCA	All substances listed as active on the TSCA inventory
DSL	All components of this product are on the Canadian DSL
DSL	All components of this product are on the Canadian DSL

Inventories Legend TSCA (USA), DSL (Canada), REACH(Europe), AIC (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

Further information
NFPA:

HMIS III:

HEALTH	2*
FLAMMABILITY	1
PHYSICAL HAZARD	0

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

The information and recommendations set forth herein are believed to be accurate. Because some of the information is derived from information provided to the H.B. Fuller Company from its suppliers, and because the H.B. Fuller Company has no control over the conditions of handling and use, the H.B. Fuller Company makes no warranty, expressed or implied, regarding the accuracy of the data or the results to be obtained from the use thereof. The information is supplied solely for your information and consideration, and the H.B. Fuller Company assumes no responsibility for use or reliance thereon. It is the responsibility of the user of H.B. Fuller Company products to comply with all applicable federal, state and local laws and regulations.