

SAFETY DATA SHEET**Millennium PG-1 EF ECO Part 1**

Version 1.1

Revision Date 01/13/2024

SECTION 1. PRODUCT AND COMPANY IDENTIFICATION

Product name : Millennium PG-1 EF ECO Part 1
Product code : 100000029396

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 : Adhesive
Restrictions on use : For industrial use only.

SECTION 2. HAZARDS IDENTIFICATION**Emergency Overview**

Appearance	Chemicals under pressure
Color	amber
Odor	aromatic

GHS Classification

Gases under pressure : Compressed gas
Acute toxicity (Inhalation) : Category 4
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

GHS label elements

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Hazard pictograms : 

Signal Word : Danger

Hazard Statements:

H280 Contains gas under pressure; may explode if heated. H315 Causes skin irritation. H317 May cause an allergic skin reaction. H319 Causes serious eye irritation. H332 Harmful 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.

Precautionary Statements:

Prevention: P260 Do not breathe dusts or mists. 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 + P312 IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER/ doctor if you feel unwell. 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. P410 + P403 Protect from sunlight. Store in a well-ventilated place.

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

Potential Health Effects
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

Hazardous ingredients

Chemical name	CAS-No.	Concentration [%]
Polymethylene polyphenyl isocyanate	9016-87-9	90 - 100
trans-1-chloro-3,3,3-trifluoroprop-1-ene	102687-65-0	1 - 5

Actual concentration is withheld as a trade secret

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SECTION 4. FIRST AID MEASURES

- General advice : If on clothes, remove clothes.
Take the victim into fresh air.
Show this material safety data sheet to the doctor in attendance.
Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.
- If inhaled : Remove person to fresh air. If signs/symptoms continue, get medical attention.
In case of unconsciousness bring patient into stable side position for transport.
- In case of skin contact : Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.
If skin irritation persists, call a physician.
- In case of eye contact : Flush eyes with water at least 15 minutes. Get medical attention if eye irritation develops or persists.
- If swallowed : If accidentally swallowed obtain immediate medical attention.
Rinse mouth with water.
If conscious, drink plenty of water.
Do NOT induce vomiting.
If symptoms persist, call a physician.
- Most important symptoms and effects, both acute and delayed : Causes skin irritation.
May cause an allergic skin reaction.
Causes serious eye irritation.
Harmful if inhaled.
May cause allergy or asthma symptoms or breathing difficulties if inhaled.
May cause respiratory irritation.
May cause damage to organs through prolonged or repeated exposure.
- Notes to physician : No further relevant information available.

SECTION 5. FIRE-FIGHTING MEASURES

- Suitable extinguishing media : Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
Water mist
Dry powder
Carbon dioxide (CO₂)
Alcohol-resistant foam
- Unsuitable extinguishing : Water with a full water jet

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media

- Specific hazards during fire fighting : May release toxic, irritating and/or corrosive gases.
In case of fire, the following substance(s) may occur:
Carbon monoxide
- Specific extinguishing methods :
Further information : In the event of fire, wear self-contained breathing apparatus.
Fire residues and contaminated fire extinguishing water must be disposed of in accordance with local regulations.
Collect contaminated fire extinguishing water separately. This must not be discharged into drains.
- Special protective equipment for fire-fighters : No special protective measures against fire required.

SECTION 6. ACCIDENTAL RELEASE MEASURES

- Personal precautions, protective equipment and emergency procedures : Remove all sources of ignition.
Use personal protective equipment.
Use breathing protection against the effects of fumes/dust/aerosol.
Evacuate personnel to safe areas.
Ensure adequate ventilation.
- Environmental precautions : The product should not be allowed to enter drains, water courses or the soil.
Prevent the material from reaching sewage system, holes and cellars.
If the product contaminates rivers and lakes or drains inform respective authorities.
- Methods and materials for containment and cleaning up : Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).
Non-sparking tools should be used.
Ensure adequate ventilation.
Send for recovery or disposal in suitable containers.
Dispose of contaminated material as waste according to section 13.

SECTION 7. HANDLING AND STORAGE

- Advice on safe handling : Avoid formation of dust and aerosols.
Use only with adequate ventilation.
Take note of emission threshold.
Use solvent-proof equipment.
Ensure that suitable extractors are available on processing machines.

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Handle with care.
 Keep eye wash bottle available on working place.
 Avoid release to the environment.
 Keep away from children.
 Pressurized container: protect from sunlight and do not expose to temperatures exceeding 50 °C. Do not pierce or burn, even after use.
 Do not spray on an open flame or other ignition source.
 Do not spray on an open flame or any incandescent material.
 Keep away from sources of ignition - No smoking. Keep away from children.

Conditions for safe storage : Keep dark, cool and dry.
 Store in cool place.

Materials to avoid :

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION
Ingredients with workplace control parameters

Components	CAS-No.	Value type (Form of exposure)	Control parameters / Permissible concentration	Basis
trans-1-chloro-3,3,3-trifluoroprop-1-ene	102687-65-0	TWA	800 ppm	US WEEL

Engineering measures : Please take care on national and local requirements.

Personal protective equipment

Respiratory protection : Use respiratory protection unless adequate risk management measures (exhaust/ ventilation) are provided or exposure assessment demonstrates that exposures are within recommended exposure guidelines.
 In case of brief exposure or low pollution (exceeding of TLV) use breathing filter apparatus. In case of intensive or longer exposure
 Ensure that suitable extractors are available on processing machines.

Hand protection
Remarks

: The glove material has to be impermeable and resistant to the product/the substance/the preparation.

The exact break through time can be obtained from the protective glove producer and this has to be observed.

The gloves need to be disposed after the penetration time and

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replaced by new ones.

Apply skin protectant before working with gloves to avoid skin swellings and use a skin cleansing and skincare product after the work.

For the permanent contact gloves made of the following materials are suitable:

If longer exposure to the chemical preparation is necessary, a sturdy overglove against mechanical strain is recommended in combination with the Barrier 02-100 underglove from Ansell or other suppliers (penetration time: 480 min).

For the permanent contact of a maximum of 15 minutes gloves made of the following materials are suitable:

Butyl rubber (minimum thickness: 0.7 mm; penetration time: 15 min)

As protection from splashes gloves made of the following materials are suitable:

Nitril (minimum thickness 0.12 mm), Disposable gloves with long cuffs

After contact with the chemical preparation, take the disposable nitrile glove off immediately and put on a new disposable nitrile glove.

Eye protection	: Tightly fitting safety goggles
Skin and body protection	: Protective clothing
Protective measures	: Keep away from food, drink and animal feeding stuffs. Instantly remove any soiled and impregnated garments. Wash hands before breaks and immediately after handling the product. Avoid contact with the eyes and skin. Store protective clothing separately.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	: Chemicals under pressure
Color	: amber
Odor	: aromatic
Odor Threshold	: is not determined
pH	: is not determined
Melting point/freezing point	: is not determined
Evaporation rate	: is not determined

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Relative vapor density	: is not determined
Density	: 1.23 g/cm ³ (20 °C)
Solubility(ies)	
Water solubility	: not miscible or difficult to mix
Partition coefficient: n-octanol/water	: no data available
Autoignition temperature	: is not determined
Thermal decomposition	: Not applicable
Explosive properties	: Product is not explosive. However, formation of explosive vapor/air mixtures is possible.

SECTION 10. STABILITY AND REACTIVITY

Reactivity	: No further relevant information available.
Chemical stability	: No decomposition if used according to the specifications.
Possibility of hazardous reactions	: Develops readily flammable vapors/fumes.
Conditions to avoid	: No further relevant information available.
Incompatible materials	: No further relevant information available.
Hazardous decomposition products	: No hazardous decomposition products are known.

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

Acute inhalation toxicity	: Acute toxicity estimate : 1.52 mg/l Exposure time: 4 Hours Test atmosphere: dust/mist Method: Calculation method
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Skin corrosion/irritation

No data available

Serious eye damage/eye irritation

No data available

Respiratory or skin sensitization

No data available

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Germ cell mutagenicity

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****Product:**

Mobility

: Medium: Soil

Remarks: Do not allow product to reach ground water, water bodies or sewage system.

Other adverse effectsNo data available

SECTION 13. DISPOSAL CONSIDERATIONS**Disposal methods**

Waste from residues

: Do not dispose of with domestic refuse.

Do not dispose of waste into sewer.

Hand over to disposers of hazardous waste.

The generation of waste should be avoided or minimized wherever possible.

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Incinerate under controlled conditions in accordance with all local and national laws and regulations.
Disposal must be made according to official regulations.

Contaminated packaging : Disposal must be made according to official regulations.

SECTION 14. TRANSPORT INFORMATION**International Regulations****IMDG-Code**

UN number : UN 3500
Proper shipping name : CHEMICAL UNDER PRESSURE, N.O.S.
(trans-1-chloro-3,3,3-trifluoroprop-1-ene)
Class : 2.2
Packing group : Not assigned by regulation
Labels : 2.2
EmS Code : F-C, S-V
Marine pollutant : no

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**

UN/ID/NA number : UN 3500
Proper shipping name : Chemical under pressure, n.o.s.
(trans-1-chloro-3,3,3-trifluoroprop-1-ene)
Class : 2.2
Packing group : Not assigned by regulation
Labels : NON-FLAMMABLE GAS
ERG Code : 126
Marine pollutant : no

Special precautions for user

The transport classification(s) provided herein are for informational purposes only, and solely based upon the properties of the unpackaged material as it is described within this Safety Data Sheet. Transportation classifications may vary by mode of transportation, package sizes, and variations in regional or country regulations.

SECTION 15. REGULATORY INFORMATION

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

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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
4,4'-Methylenediphenyl diisocyanate	101-68-8
Polymethylene polyphenyl isocyanate	9016-87-9

Clean Air Act

This product does not contain any hazardous air pollutants (HAP), as defined by the U.S. Clean Air Act Section 112 (40 CFR 61).

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
AIIC	All components are listed on the inventory, regulatory obligations/restrictions apply
DSL	All components of this product are on the Canadian DSL
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

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

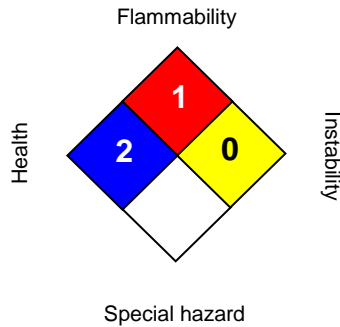
SECTION 16. OTHER INFORMATION

Prepared by: Global Regulatory Department
EU-MSDS@hbfuller.com

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Further information
NFPA:

HMIS III:

HEALTH	2*
FLAMMABILITY	1
PHYSICAL HAZARD	3

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

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