

Safety Data



1. Identification of Substance:

Product Name: GreenTuff FR B Component Product Use: Polyurea amine component Field of Application: building and metal industry Identified uses: Industrial/Professional use .	Company Details: Green Shield Products Address: 40 Cypress Creek Parkway #338 Houston, Texas 77090 Telephone: 877-476-7453 24-Hr. Emergency Response: CHEMTREC (800) 424-9300 INTERNATIONAL: +1-(703) 527-3887
---	---

2. Hazards Identification

GHS Ratings:

Skin corrosive	2	Reversible adverse effects in dermal tissue, Draize score: $\geq 2.3 < 4.0$ or persistent inflammation
Eye corrosive	1	Serious eye damage: Irreversible damage 21 days after exposure, Draize score: Corneal opacity ≥ 3 , Iritis > 1.5
Carcinogen	1A	Known Human Carcinogen Based on human evidence
Reproductive toxin	1B	Presumed, Based on experimental animals
Aquatic toxicity	A1	Acute toxicity ≤ 1.00 mg/l

GHS Hazards

H315	Causes skin irritation
H318	Causes serious eye damage
H350	May cause cancer
H360	May damage fertility or the unborn child
H400	Very toxic to aquatic life

GHS Precautions

P201	Obtain special instructions before use
P202	Do not handle until all safety precautions have been read and understood
P264	Wash hands thoroughly after handling
P273	Avoid release to the environment
P280	Wear protective gloves/protective clothing/eye protection/face protection
P281	Use personal protective equipment as required
P310	Immediately call a POISON CENTER in case of overexposure.
P321	Specific treatment is urgent (see Section 4 First Aid measures)
P362	Take off contaminated clothing and wash before reuse
P391	Collect spillage
P302+P352	IF ON SKIN: Wash with soap and water



Energy Efficient Building Product Solutions

877-476-7453
greenshieldproducts.com



Safety Data



P305+P351 IF IN EYES: Rinse continuously with water for several minutes.
 +P338 Remove contact lenses if present and easy to do – continue rinsing
 P308+P313 IF exposed or concerned: Get medical advice/attention
 P332+P313 If skin irritation occurs: Get medical advice/attention
 P405 Store locked up
 P501 Dispose of contents/container in accordance with existing federal, state, and local environmental control laws

Signal Word: Danger



Eyes: Corrosive to eyes.

Skin: Harmful in contact with skin.

Inhalation: Harmful if inhaled.

Ingestion: Not expected to be a route of exposure. Consult physician.

Chronic Effects: Possible harmful target organ effects.

3. Composition/information on ingredients:

Chemical Name	CAS number	Weight Concentration %
Propylene glycol diamine, 2-amino-, diether with Propylene *	9046-10-0	40% - 70%
Diethyltoluenediamine *	68479-98-1	10% - 30%
2-Propanol, 1-chloro-, phosphate (3:1) *	13674-84-5	10% - 30%

*The exact percentage (concentration) of composition has been withheld as a trade secret.

4. First Aid Measures:

Description of first aid measures

General advice Immediate medical attention is required.

Eye contact Immediately flush with plenty of water. After initial flushing, remove any contact lenses and continue flushing for at least 15 minutes. Keep eye wide open while rinsing. Call a physician immediately.

Skin contact Immediate medical attention is required. Wash off immediately with soap and plenty of water while removing all contaminated clothes and shoes.

Inhalation Immediate medical attention is required. Remove to fresh air. If not breathing, give artificial respiration. Avoid direct contact with skin. Use barrier to give mouth-to-mouth resuscitation.



Energy Efficient Building Product Solutions

877-476-7453

greenshieldproducts.com



Safety Data



Ingestion Do NOT induce vomiting. Call a physician or poison control center immediately. Never give anything by mouth to an unconscious person. Drink plenty of water.

Self-protection of first aider Use personal protective equipment as required. Avoid contact with skin, eyes or clothing the first aider.

Most important symptoms and effects, both acute and delayed

Symptoms May cause redness and tearing of the eyes. Coughing and/ or wheezing. May cause skin irritation. May cause allergic skin reaction.

Indication of any immediate medical attention and special treatment needed

Note to physicians Treat symptomatically.

5. Firefighting measures

Suitable extinguishing media

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Dry chemical, CO₂, sand, earth, water spray or regular foam.

Unsuitable extinguishing media Do not use a solid water stream as it may scatter and spread fire.

Specific hazards arising from the chemical

Thermal decomposition can lead to release of irritating and toxic gases and vapors.

Explosion data

Sensitivity to Mechanical Impact None.

Sensitivity to Static Discharge None.

Protective equipment and precautions for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full **protective gear**.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures

Personal precautions Use personal protective equipment as required. Keep people away from and upwind of spill/leak.

Environmental precautions

Environmental precautions Prevent further leakage or spillage if safe to do so. Prevent product from entering drains.



Energy Efficient Building Product Solutions

877-476-7453

greenshieldproducts.com



Safety Data



Methods and material for containment and cleaning up

Methods for containment	Prevent further leakage or spillage if safe to do so. Cover powder spill with plastic sheet or tarp to minimize spreading. Dike far ahead of liquid spill for later disposal.
Methods for cleaning up	Cover liquid spill with sand, earth or other non-combustible absorbent material. Use personal protective equipment as required. Dam up. Take up mechanically, placing in appropriate containers for disposal. Clean contaminated surface thoroughly.

7. Handling and Storage

Precautions for safe handling

Advice on safe handling	Avoid contact with skin, eyes or clothing. Wash contaminated clothing before reuse. Use personal protective equipment as required. Do not breathe dust/fume/gas/mist/vapors/spray. Do not eat, drink or smoke when using this product.
-------------------------	--

Conditions for safe storage, including any incompatibilities

Storage Conditions	Keep container tightly closed in a dry and well-ventilated place. Keep out of the reach of children.
Incompatible materials	Strong oxidizing agents. Strong acids. Strong bases.

8. Exposure Controls and Personal Protection:

Control parameters

Exposure Guidelines	This product, as supplied, does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.
----------------------------	---

Appropriate engineering controls

Engineering Controls	Showers Eyewash stations Ventilation systems.
-----------------------------	---

Individual protection measures, such as personal protective equipment

Eye/face protection	Tight sealing safety goggles.
Skin and body protection	Wear protective gloves and protective clothing.



Energy Efficient Building Product Solutions

877-476-7453
greenshieldproducts.com



Safety Data



Respiratory protection

If exposure limits are exceeded or irritation is experienced, NIOSH/MSHA approved respiratory protection should be worn. Positive-pressure supplied air respirators may be required for high airborne contaminant concentrations. Respirator protection must be provided in accordance with current local regulations.

General Hygiene Considerations

When using do not eat, drink or smoke. Regular cleaning of equipment, work area and clothing is recommended. Avoid contact with skin, eyes or clothing. Wash hands thoroughly after handling. Keep away from food, drink and animal feeding stuffs.

9. Physical and Chemical Properties:

Information on basic physical and chemical properties

Physical state	liquid	Odor	Slight Amine
Appearance	viscous	Odor threshold	no information available
Color	pigmented		pigmented

<u>Property</u>	<u>Values</u>	<u>Remarks - Method</u>
pH	10-12	

Melting point / freezing point	No information available
Boiling point / boiling range	No information available
Flash point	> 120 °C / 248 °F
Evaporation rate	No information available
Flammability (solid, gas)	No information available
Flammability Limit in Air	
Upper flammability limit:	No information available
Lower flammability limit:	No information available
Vapor pressure	No information available
Vapor density	>1
Relative density	1.0-1.1
Water solubility	negligible
Solubility in other solvents	No information available
Partition coefficient	No information available
Autoignition temperature	No information available
Decomposition temperature	No information available
Kinematic viscosity	> 1000 mm ² /s
Dynamic viscosity	1000 mm ² /s
Explosive properties	Not an explosive
Oxidizing properties	Not applicable



Energy Efficient Building Product Solutions

877-476-7453

greenshieldproducts.com



Safety Data



Other Information

Softening point

No information available

Molecular weight

No information available

VOC Content (%)

No information available

Density

No information available

Bulk density

No information available

10. Stability and Reactivity:

Reactivity

No data available

Chemical stability

Stable under recommended storage conditions.

Possibility of Hazardous Reactions

None under normal processing.

Conditions to avoid

Elevated Temperature. Incompatible materials.

Incompatible materials

Strong oxidizing agents. Strong acids. Strong bases.

Hazardous Decomposition Products

Thermal decomposition can lead to release of irritating and toxic gases and vapors.

11. Toxicological Information:

Information on likely routes of exposure

Product Information

Inhalation

Irritating to respiratory system.

Eye contact

Corrosive to the eyes and may cause severe damage including blindness.

Skin contact

May cause burns. May cause sensitization by skin contact. Harmful in contact with skin.

Ingestion

May be harmful if swallowed.

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Propylene glycol diamine, 2-amino-, diether with Propylene *	= 242 mg/kg (Rat)	40% - 70%	
Diethyltoluenediamine *	= 472 mg/kg (Rat) = 485 mg/kg (Rat)	= 700 mg/kg (Rabbit) -	
2-Propanol, 1-chloro-, phosphate (3:1) *	= 1500 mg/kg (Rat)	= 1230 mg/kg (Rabbit)	= 5 mg/L (Rat) 4 h



Energy Efficient Building Product Solutions

877-476-7453

greenshieldproducts.com



Safety Data



Information on toxicological effects

Symptoms May cause an allergic skin reaction. Causes skin burns. May cause redness and tearing of the eyes. Coughing and/ or wheezing.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Corrosivity Risk of serious damage to eyes. Causes burns.
Sensitization May cause sensitization by skin contact.
Germ cell mutagenicity No information available.
Carcinogenicity No information available.
Reproductive toxicity No information available.
STOT-single exposure Target Organs. Respiratory system. Eyes. Skin.
STOT-repeated exposure Causes damage to organs through prolonged or repeated exposure.
Chronic toxicity May cause adverse effects on the bone marrow and blood-forming system. May cause adverse liver effects.
Target Organ Effects blood, Central nervous system, Eyes, kidney, liver, Respiratory system, Skin, Urinary Tract.
Aspiration hazard No information available.

Numerical measures of toxicity - Product Information

The following values are calculated based on chapter 3.1 of the GHS document .

ATEmix (oral) 324.00 mg/kg
ATEmix (dermal) 490.00 mg/kg

12. Ecological Information:

Ecotoxicity

Toxic to aquatic life with long lasting effects

65.07206 % of the mixture consists of component(s) of unknown hazards to the aquatic environment

Persistence and degradability

No information available.

Bioaccumulation

Chemical Name	Partition coefficient
2-Propanol, 1-chloro-, phosphate (3:1)	2.59

Other adverse effects

No information available.



Energy Efficient Building Product Solutions

877-476-7453
 greenshieldproducts.com



Safety Data



13. Disposal considerations

Waste treatment methods

Disposal of wastes	Disposal should be in accordance with applicable regional, national and local laws and regulations.
Contaminated packaging	Do not reuse container.
US EPA Waste Number	D002

14. Transport Information

DOT

UN/ID no	UN3066
Proper shipping name	Paint
Hazard Class	8
Packing Group	III
Special Provisions	B52, IB3, T4, TP1, TP29
Description	UN3066, Paint, 8, III
Emergency Response Guide Number	153

TDG

UN/ID no	UN3066
Proper shipping name	Paint
Hazard Class	8
Packing Group	III
Description	UN3066, Paint, 8, III

IATA

UN/ID no	UN3066
Proper shipping name	Paint
Hazard Class	8
Packing Group	III
ERG Code	8L
Special Provisions	A3, A72, A803, A192 UN3066, Paint, 8,
Description	III

IMDG

UN/ID no	UN3066
Proper shipping name	Paint
Hazard Class	8
Packing Group	III
EmS-No	F-A, S-B
Special Provisions	163, 223
Description	UN3066, Paint, 8, III



Energy Efficient Building Product Solutions

877-476-7453
greenshieldproducts.com



Safety Data



15. Regulatory Information:

International Inventories

TSCA	Complies
DSL/NDSL	Complies
EINECS/ELINCS	Complies
IECSC	Complies
KECL	Complies
PICCS	Complies
AICS	

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

US Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

SARA 311/312 Hazard Categories

Acute health hazard	Yes
Chronic Health Hazard	Yes
Fire hazard	No
Sudden release of pressure hazard	No
Reactive Hazard	No

CWA (Clean Water Act)

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)



Energy Efficient Building Product Solutions

877-476-7453

greenshieldproducts.com



Safety Data



CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material

US State Regulations

California Proposition 65

This product contains the following Proposition 65 chemicals

Chemical Name	California Proposition 65
Methyl alcohol - 67-56-1	Developmental

U.S. State Right-to-Know Regulations

This product contains the following Proposition 65 chemicals

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Propylene glycol monomethyl ether 107-98-2	x	x	x
Methyl alcohol 67-56-1	x	x	x

U.S. E.P.A. Label Information

EPA Pesticide Registration Number Not applicable

16. Other Information:

NFPA Health hazards 3 Flammability 1 Instability 0 Physical and Chemical Properties -Personal protection X

HMIS Health hazards 3 Flammability 1 Physical hazards 0

Safety Data Sheet issued by Product Safety Department

This information is furnished without warranty, expressed or implied, except that it is accurate to the best knowledge of Green Shield Products. The data on these sheets relates only to the specific material designated herein. Green Shield Products assumes no legal responsibility for use or reliance upon this data. It is the user's responsibility to ensure that their activities comply with federal, state, or local laws

Date revised: 2024-12-20

Reviewer Revision 1

Date Prepared: 08/15/2021



Energy Efficient Building Product Solutions

877-476-7453
greenshieldproducts.com

