ForceField® GrimeBlaster – Ready to Use

SAFETY DATA SHEET

SECTION 1 – CHEMICAL AND COMPANY IDENTIFICATION:

Product Name: GrimeBlaster™ All Purpose Cleaner & Degreaser RTU Date Printed: 10/4/2018
Product Use/Class: General Purpose Surfactant Cleaning Solution Product ID: F GAPC

Supplier:	Shield Industries, Inc.	Manufacturer:	Shield Industries, Inc.
Address:	31 Smokehill Lane Woodstock, GA 30188 - USA	Address:	131 Smokehill Lane Woodstock, GA 30188 - USA
Telephone:	770-517-6869	24 Hour Emergency Hotline:	800-535-5053

SECTION 2 – HAZARD IDENTIFICATION:

Physical hazards:	Corrosive (Alkaline) Liquid	
Health hazards:	Acute Toxicity	Category 4
	Skin irritation	Category 2
	Eye irritation	Category 1

Environmental hazards: Harmful to aquatic life. (H402)
OSHA defined hazards: Not classified.

Label elements:

Signal word: Danger

Hazard statement Causes serious eye damage. (H318)
Causes skin irritation. (H315)

Precautionary statements:

Prevention: Wear protective gloves/protective clothing/eye protection/face protection. (P280)
Wash hands and exposed skin thoroughly after handing. (P264)
Avoid breathing dust/fume/gas/mist/vapours/spray. (P261)

Response: IF SWALLOWED: Immediately call a POISON CENTER/doctor. Do not induce vomiting. (P301 + P310 + P331)
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get immediate medical attention. (P305 + P351 + P338 + P315)

Storage: Keep out of reach of children. (P102)

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

Hazard(s) not otherwise classified (HNOC):
Contains Citrus Oils. May produce an allergic reaction in persons already sensitized.

Supplemental information: None.

SECTION 3 COMPOSITION/INFORMATION ON COMPONENTS

COMPONENTS	CAS NUMBER	%
Water	7732-18-5	81 - 88 %
Detergent, Emulsifier, Wetting Agent (Proprietary)	Trade Secret*	2 - 4 %
Dipropyleneglycol Monomethylether	34590-94-8	0.3 - 1 %
Ethyl Lactate	97-64-3	0.3 - 1 %
Monoethanolamine	141-43-5	0.3 - 1 %
Ethylenediaminetetracetic Acid, Sodium Salt	64-02-8	< 1 %
Fragrance	Mixture	< 0.04 %
Violet Dye	Mixture	< 0.005 %

* Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

Additional Information:
Substances in the product which may present a health or environmental hazard, or which have been assigned occupational exposure limits, are detailed below:
None

SECTION 4 FIRST AID MEASURES

Inhalation: Move person to fresh air and keep at rest in a position comfortable for breathing. If breathing is labored, administer oxygen. If systems persist, contact a POISON CENTER or doctor/physician.

Skin contact: If on skin, wash with plenty of water. If on clothes, remove clothing and wash before reuse. Get medical attention if irritation or rash develops and persists.

Eye contact: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Keep eyes wide open and continue rinsing. Get immediate medical attention.

Ingestion: Call a physician or local Poison Control Center immediately and follow instructions given. Never give anything by mouth to an unconscious person. DO NOT induce vomiting.

Most important symptoms/effects, acute and delayed:

Eyes: Causes serious eye damage.

Skin: Contains citrus oils. Prolonged or repeated contact may produce irritation, rash, or an allergic reaction in persons already sensitized.

Inhalation: High vapour or mist concentrations may cause nasal and respiratory irritation.

Ingestion: High levels of ingestion may cause gastrointestinal irritation (nausea, vomiting, diarrhea).

Indication of immediate medical attention and special treatment needed:

If ingested: Immediately seek medical attention. Provide general supportive measures and treat symptomatically. Keep victim under observation. Symptoms may be delayed.

General information:

Move affected persons from dangerous area. Do not leave victim unattended. Ensure that medical personnel are aware of the material(s) involved. Show this safety data sheet to the doctor in attendance.

SECTION 5 FIRE FIGHTING MEASURES

Suitable extinguishing media:

Non-combustible. Use media appropriate for surrounding fire.

Unsuitable extinguishing media:

Do not use water jet.

Specific hazards arising from the chemical:

Combustion or thermal decomposition will evolve toxic and/or irritant vapours. Forms fumes of oxides of carbon and nitrogen. Forms hydrogen chloride and methyl chloride.

Special protective equipment and precautions for firefighters:

Firefighters must use standard protective equipment including flame retardant coat, helmet with face shield, gloves, rubber boots, and self-contained breathing apparatus (SCBA).

Fire-fighting equipment/instructions:

Move containers from fire area if you can do so without risk. Containers should be cooled with water to prevent vapour pressure build up.

Specific methods:

Use standard firefighting procedures and consider the hazards of other involved materials. Move containers from fire area if you can do so without risk. In the event of fire and/or explosion do not breathe fumes.

General fire hazards:

None known.

SECTION 6 ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:

Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Wear appropriate protective equipment and clothing during clean-up. Do not get in eyes. Avoid skin contact. Do not breathe vapours. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Ventilate closed spaces before entering them.

Environmental precautions:

Avoid release to the environment. Avoid discharge into drains, sewers, water courses or onto the ground. Prevent further leakage or spillage if safe to do so. Inform appropriate managerial or supervisory personnel and authorities of all environmental releases.

Methods and materials for containment and cleaning up:

Contain spillages and then collect with sand, earth, diatomaceous earth, vermiculite, or any other suitable adsorbent material. Collect spillage. Transfer to a container for disposal or recovery. Following product recovery, flush area with water. If possible prevent water running into sewers. For waste disposal, see section 13 of the SDS.

SECTION 7 HANDLING AND STORAGE

Precautions for safe handling:

Avoid contact with skin and eyes. Wear appropriate personal protective equipment. Avoid breathing mist/spray. Smoking, eating and drinking should be prohibited in the application area. Wash hands thoroughly after handling. Avoid release to the environment. Observe good industrial hygiene practices. Use product in a well-ventilated area only.

Advice on protection against fire and explosion:

None – Product is non-combustible

Conditions for safe storage, including any incompatibilities:

Keep container tightly closed in a dry and well-ventilated place. Keep cool. Do not allow material to freeze. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Observe label precautions. Avoid storing in the presence of oxidizing or reducing agents or substances that react with water. Protect from sunlight.

SECTION 8 EXPOSURE CONTROLS / PERSONAL PROTECTION

Occupational exposure limits of components:

US. ACGIH Threshold Limit Values

Components	CAS	Type	Value
Dipropylene glycol monomethyl ether	34590-94-8	TWA	100 ppm
		STEL	150 ppm
Ethanolamine	141-43-5	TWA	3 ppm
		STEL	6 ppm

US. OSHA (29 CFR 1910.1000 Table Z-1 Limit Values

Components	CAS	Type	Value
Dipropylene glycol monomethylether	34590-94-8	PEL	100 ppm 600 mg/m^3
Ethanolamine	141-43-5	PEL	3 ppm

Appropriate engineering controls:

Provide sufficient mechanical ventilation (general and local exhaust) to maintain exposure below the level of overexposure from known, suspected or apparent adverse effects.

Individual protection measures, such as personal protective equipment:

Eye/face protection:

Wear safety glasses with side shields (or goggles) when splashing is possible.

Hand protection:

Wear appropriate chemical resistant gloves (Butyl rubber, Neoprene, or Natural rubber). Check with protective equipment manufacturer's data.

Skin protection/Other:

Wear appropriate chemical resistant clothing. Use of an impervious apron is recommended.

Respiratory protection:

Not normally required. If workplace exposure limits of product (or any component) are exceeded, a NIOSH/MSHA approved air supplied respirator is advised in the absence of proper environmental controls. OSHA regulations also permit other NIOSH/MSHA respirators (negative pressure type) under specified conditions (consult your safety representative).

Thermal hazards:

Not normally required.

General hygiene considerations:

When using, do not eat, drink or smoke. Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

Environmental exposure controls:

Do not allow to enter drains, sewers or waterways. Avoid release to the environment. Material is harmful to aquatic life.

SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	
Physical state:	Liquid
Form:	Liquid
Color:	**C**lear purple color
Odor:	Characteristic mild
Odor threshold:	Not available.
pH:	9.5 – 10.5
Melting point/freezing point:	Not available.
Initial boiling point and boiling range	100 °C estimated
Flash point:	None below 93 °C
Evaporation rate:	Aproximately 1 (water = 1)
Flammability (solid, gas):	Not applicable.
Upper/lower flammability or explosive limits:	
Flammability limit – lower (%):	Not available.
Flammability limit – upper (%):	Not available.
Explosive limit - lower (%):	Not available.
Explosive limit - upper (%):	Not available.

Vapor pressure:	Not available.
Relative Vapor density:	Not available.
Relative density:	1.00 +/- 0.02
Solubility (water):	Soluble
Partition coefficient (n-octanol/water):	Not available.
Auto-ignition temperature:	Not applicable.
Decomposition temperature:	Not available.
Viscosity (kinematic cSt @ 40 °C):	Not available.
Explosive properties:	Not explosive.
Oxidizing properties:	Not oxidizing.
Other information:	
VOC Level:	1.8%

SECTION 10 STABILITY AND REACTIVITY

Reactivity:

The product is stable and non-reactive under normal ambient conditions of use, storage and transport.

Chemical stability:

Material is stable under normal conditions.

Possibility of hazardous reactions:

None anticipated.

Conditions to avoid:

Avoid excessive heat and freezing, and incompatible materials.

Incompatible materials:

Strong oxidizing agents and substances that react with water.

Hazardous decomposition products:

At temperatures over 200 C, or under fire conditions, thermal decomposition will evolve toxic and irritant vapours. Forms: Low molecular weight organic compounds; oxides of carbon and nitrogen, smoke of unknown toxicity, methyl chloride and hydrogen chloride.

SECTION 11 TOXICOLOGICAL INFORMATION

Information on likely routes of exposure:

Eyes: Causes serious eye damage.

Skin: Prolonged or repeated contact may be harmful to skin, causing irritation to skin. Contains citrus oils which may produce an allergic reaction in persons already sensitized.

Inhalation: High vapour or mist concentrations may cause nasal and respiratory irritation.

Symptoms related to the physical, chemical and toxicological characteristics:

May cause irritation of nose and throat. Eye damage. Symptoms may include stinging, tearing, redness, swelling, and blurred vision. Skin irritation. May cause redness and/or degreasing of skin.

Information on toxicological effects of components:

Acute toxicity:

Components	CAS#	Test	Species	Test Results
Dipropylene glycol monomethylether	34590-94-8	Acute Oral LD50	Rat	5,152 mg/kg
Ethyl Lactate	97-64-3	Acute Oral LD50	Rat	8,200 mg/kg
		Acute Dermal LD50	Rabbit	> 5,000 mg/kg
Monoethanolamine	141-43-5	Acute Oral LD50	Rat	1,515 mg/kg
		Acute Dermal LD50	Rabbit	2.46 – 2.83 mg/kg
		Acute Inhalation LC50	Rat	0.13 mg/l (vapor 7 hr.)
Ethylenediamine-tetraacetic acid, sodium salt	64-02-8	Acute Oral LD50	Rat	> 2,000 mg/kg

Skin corrosion/irritation: Corrosive. May cause skin irritation and/or dermatitis.

Serious eye damage/eye irritation: Causes serious eye damage.

Respiratory or skin sensitization:

Respiratory sensitization: Vapours may cause irritation.

Skin sensitization: This product does not contain materials at levels that would normally be expected to cause an allergic skin reaction.

Germ cell mutagenicity: No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity: No data.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050):

Not listed.

Repeated dose toxicity:

Component:	Monoethanolamine
Species:	Rat
Application Route:	Oral
NOEL:	300 mg/kg/day
Test Duration:	75 days

Component:	Monoethanolamine
Species:	Rat
Application Route:	Inhalation
NOAEC:	10 mg/m^3 (Local effects)
NOEC:	150 mg/m^3 (Systemic effects)

Specific target organ toxicity - single exposure:

No data available.

Teratogenicity:
No data available.

Aspiration hazard:
No data available.

SECTION 12 ECOLOGICAL INFORMATION

Ecotoxicity: No data available for this product, however this product is most likely harmful to aquatic life.

Acute Toxicity:

Components/CAS	Test	Species	Test Results
Dipropyleneglycol monomethylether/ 34590-94-8	Aquatic Fish LC50	Fathead minnow	10,000 mg/l, 96 hr.
	Aquatic Crustacea EC50	Water flea (Daphnia magna)	1,919 mg/l, 48 hr.
Ethyl lactate/ 97-64-3	Aquatic Fish LC50	Zebra fish (Danio rerio)	320 mg/l, 96 hr.
	Aquatic Crustacea EC50	Water flea (Daphnia magna)	560 mg/l, 48 hr.
Monoethanolamine/ 141-43-5	Aquatic Fish LC50	Cyprinus carpio	349 mg/l, 96 hr.
	Aquatic Fish LC50	Carassius auratus	170 mg/l, 96 hr.
	Aquatic Crustacea EC50	Water flea (Daphnia magna)	65 mg/l, 48 hr.
	Aquatic Plant EC50	Selenastrum capricornutum	2.5 mg/l, 72 hr.
	Aquatic Plant EC50	Scenedesmus subspicatus	22 mg/l, 72 hr.
Ethylenediaminetetra-acetic acid, sodium salt/ 64-02-8	Aquatic Fish LC50	Fathead minnow	59.8 mg/l, 96 hr.
	Aquatic Fish LC50	Bull gill sunfish	760 mg/l, 96 hr.

Long Term Toxicity:
No data available.

Persistence and degradability:
Readily biodegradable.

Bioaccumulative potential:
No data available.

Mobility in soil:
No data available.

Results of PBT and vPvB assessment:
No data available.

Other adverse effects:
None known.

SECTION 13 DISPOSAL CONSIDERATIONS

Waste treatment/disposal instructions:

Disposal should be in accordance with local, state, or national legislation. Consult an accredited waste disposal contractor or the local authority for advice.

Waste from residues / unused products:

Do not dispose of waste into sewer. Do not contaminate ponds, waterways or ditches with chemical or used container. Send to a licensed waste management company. Dispose of in accordance with local regulations.

Contaminated packaging:

Exercise caution as empty containers or liners may retain some product residues. Do not re-use empty containers. Do not burn, or use a cutting torch on, empty containers. Empty containers should be taken to an approved waste handling site for recycling or disposal.

SECTION 14 TRANSPORT INFORMATION

DOT

UN number: Not applicable
UN proper shipping name: Cleaning compounds N.O.S.
Transport hazard class(es):
Class: Not applicable
Subsidiary risk: -
Label(s): Not applicable
Packing group: Not applicable
Special precautions for user:
Read safety instructions, SDS and emergency procedures before handling. Read safety instructions, SDS and emergency procedures before handling.
Environmental hazards: No
Special provisions: None Assigned
Packaging exceptions:
None – Not classified as dangerous for transportation
Packaging bulk:
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:
Not applicable

IATA

UN number: Not applicable
UN proper shipping name: Cleaning compounds N.O.S.
Transport hazard class(es):
Class Not applicable
Subsidiary risk -
Label(s) Not applicable
Packing group Not applicable
Environmental hazards No
ERG Code Not applicable
Special precautions for user:
Read safety instructions, SDS and emergency procedures before handling. Read Safety instructions, SDS and emergency procedures before handling.

Packaging bulk:

Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:
Not applicable

IMDG

UN number: Not applicable
UN proper shipping name: Cleaning compounds, n.o.s.
Transport hazard class(es):
Class: Not applicable
Subsidiary risk: -
Label(s): Not applicable
Packing group: Not applicable
Environmental hazards:
Marine pollutant: No
Special precautions for user:
Read safety instructions, SDS and emergency procedures before handling. Read safety instructions, SDS and emergency procedures before handling.

Packaging bulk:
Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code:
Not applicable

SECTION 15 REGULATORY INFORMATION

US federal regulations:
This product is not a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200. All components are on the U.S. EPA TSCA Inventory List or polymer exempt.

CERCLA Hazardous Substance List (40 CFR 302.4)
No Listed materials.

SARA 311/312 – Superfund Amendments and Reauthorization Act of 1986:
Hazard categories:

Immediate Hazard	Yes
Delayed Hazard	No
Fire Hazard	No
Sudden Release	No
Reactivity	No

SARA 313 – Toxic Chemicals (40 CFR 372):
No Listed materials.

SARA 302 Threshold Planning Quantity:
Not regulated.

Other federal regulations:

Clean Air Act (CAA) Ozone-Depletion Potential:
This product neither contains, nor was manufactured with a Class I, or Class II ODS as defined by the U.S. Clean Air Act Section 602 (40 CFR 82, Subpt. A, App. A+B).

US state regulations

U.S. California Proposition 65:

This product does not contain any chemicals known to the State of California to cause cancer, birth, or any other reproductive effects.

Massachusetts Right To Know:

Dipropylene glycol monomethyl ether	CAS# 34590-94-8
Ethyl lactate	CAS# 97-64-3

Pennsylvania Right To Know:

Dipropylene glycol monomethyl ether	CAS# 34590-94-8
Ethyl lactate	CAS# 97-64-3

New Jersey Right To Know:

Dipropylene glycol monomethyl ether	CAS# 34590-94-8
Ethyl lactate	CAS# 97-64-3

SECTION 16 OTHER INFORMATION

NFPA RATING: HEALTH: 1 FLAMMABILITY: 0 REACTIVITY: 0

PREPARATION INFORMATION:
DATE CREATED: 01/01/06 LAST REVISION: 10/04/2018
CREATED/REVISED BY: R. Lasnik

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End of SDS