Safety Data Sheet

Issue Date 05-Aug-2014 **Revision Date:** 05-Aug-2014 **Version** 1

1. IDENTIFICATION

Product Identifier
Product Name Dynamic Powerhouse SHOOTER Water Stain Breaker

Other means of identification
SDS # DRC-004

Recommended use of the chemical and restrictions on use
Recommended Use Hard water stain remover.

Details of the supplier of the safety data sheet
Supplier Address
Dynamic Research Company, Inc
4800 SW Meadows
STE 300
Lake Oswego, OR 97035

Emergency Telephone Number
Company Phone Number (General Information) 1-503-699-1335
Emergency Telephone (24 hr) 1-800-255-3924 (US/Canada)
1-813-248-0585 (International)

2. HAZARDS IDENTIFICATION

Classification

Skin corrosion/irritation	Category 2
Serious eye damage/eye irritation	Category 1

Signal Word
Danger

Hazard Statements
Causes skin irritation
Causes serious eye damage

Appearance Blue-green liquid **Physical State** Liquid **Odor** Mint-like

Precautionary Statements - Prevention

Wash face, hands and any exposed skin thoroughly after handling
Wear protective gloves/protective clothing/eye protection/face protection

Precautionary Statements - Response

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing
Immediately call a POISON CENTER or doctor/physician
IF ON SKIN: Wash with plenty of soap and water
If skin irritation occurs: Get medical advice/attention
Take off contaminated clothing and wash it before reuse

Hazards Not Otherwise Classified (HNOC)

May be harmful if swallowed

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No	Weight-%
Water, coloring, fragrance & similar non-hazardous ingredients	Proprietary	Balance
Surfactants	Proprietary	1-5
Sulfamic acid	5329-14-6	1-8
Glycolic Acid	79-14-1	1-8
Citric Acid	79-92-9	1-8
Ammonium bifluoride	1341-49-7	1-7
dipropylene glycol monomethyl ether (DPM)	34590-94-8	1-3

4. FIRST-AID MEASURES

First Aid Measures

Eye Contact IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.

Skin Contact IF ON SKIN (or hair): Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. If skin irritation occurs: Get medical advice/ attention.

Inhalation Remove to fresh air. Seek medical advice if recovery is not rapid.

Ingestion Rinse mouth. Do not induce vomiting. If conscious and alert, rinse mouth and drink 2-4 cups of milk or water. Never give anything by mouth to an unconscious person. Seek medical attention.

Most important symptoms and effects

Symptoms Causes serious eye damage. Direct contact may cause painful stinging or burning of eyes and lids, watering of eye, and irritation. Causes skin irritation. Skin may exhibit redness. Mist or vapor inhalation can cause irritation to the nose, throat, and upper respiratory tract. May be harmful if swallowed. Ingestion may cause irritation of the gastrointestinal tract, cramps, vomiting or diarrhea.

Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media
Dry chemical, CO2, water spray or regular foam.

Unsuitable Extinguishing Media Not determined.

Specific Hazards Arising from the Chemical
None known. Heat of fire may melt containers.

Hazardous Combustion Products Ammoniacal vapors, Hydrogen Fluoride, Oxides of Nitrogen.

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 protection recommended in Section 8.
Environmental Precautions	See Section 12 for additional Ecological Information. See Section 13, Disposal Considerations, for additional information.

Methods and material for containment and cleaning up

Methods for Containment	Prevent further leakage or spillage if safe to do so.
Methods for Cleaning Up	Scoop up and collect with an inert absorbent and place into closable containers for disposal. Following product recovery, flush area with water.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on Safe Handling	Handle in accordance with good industrial hygiene and safety practice. Wash face, hands, and any exposed skin thoroughly after handling. Use personal protection recommended in Section 8. Avoid contact with skin and eyes. For Industrial or professional use only.

Conditions for safe storage, including any incompatibilities

Storage Conditions	Keep container tightly closed and store in a cool, dry and well-ventilated place. Do not store near heat or flame (containers may melt). Keep from freezing. Keep out of the reach of children.
Packaging Materials	Empty containers retain product residue and can be hazardous.
Incompatible Materials	Strong alkalis. Bleach. Cyanides. sulfides. Chlorine compounds. Do not mix with other chemicals or cleaners.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Ammonium bifluoride 1341-49-7	TWA: 2.5 mg/m^3 F	TWA: 2.5 mg/m^3 F TWA: 2.5 mg/m^3 dust (vacated) TWA: 2.5 mg/m^3	TWA: 2.5 mg/m^3 F
dipropylene glycol monomethyl ether (DPM) 34590-94-8	STEL: 150 ppm TWA: 100 ppm S*	TWA: 100 ppm TWA: 600 mg/m^3 (vacated) TWA: 100 ppm (vacated) TWA: 600 mg/m^3 (vacated) STEL: 150 ppm (vacated) STEL: 900 mg/m^3 (vacated) S* S*	IDLH: 600 ppm TWA: 100 ppm TWA: 600 mg/m^3 STEL: 150 ppm STEL: 900 mg/m^3

Appropriate engineering controls

Engineering Controls Apply technical measures to comply with the occupational exposure limits.

Individual protection measures, such as personal protective equipment

Eye/Face Protection Use chemical safety goggles if contact is likely.

Skin and Body Protection PVC, neoprene, rubber, or other impervious gloves are recommended to prevent skin contact. Wear suitable protective clothing and footwear appropriate for the risk of exposure.

Respiratory Protection Ensure adequate ventilation, especially in confined areas. If necessary, wear a MSHA/NIOSH-approved respirator.

General Hygiene Considerations Handle in accordance with good industrial hygiene and safety practice. Wash contaminated clothing before reuse.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical State	Liquid		
Appearance	Blue-green liquid	**Odor**	Mint-like
Color	Blue-green	**Odor Threshold**	Not determined

Property	Values	Remarks • Method
pH	4.4-5.0 (undiluted)	
Melting Point/Freezing Point	Not determined	
Boiling Point/Boiling Range	100 °C / 212 °F	ASTM D92
Flash Point	None	
Evaporation Rate	Not available	
Flammability (Solid, Gas)	Liquid-not applicable	
Upper Flammability Limits	Not available	
Lower Flammability Limit	Not available	
Vapor Pressure	Not available	
Vapor Density	Not available	
Relative Density (Specific Gravity)	1.041	(1=Water)
Water Solubility	Completely soluble	
Freeze Thaw Stable	Yes	
Phosphate Content	None	
Shelf Life	Three years in unopened containers	
Degradabilty	Readily Biodegradable	

10. STABILITY AND REACTIVITY

Reactivity
Not reactive under normal conditions.

Chemical Stability
Stable under recommended storage conditions.

Possibility of Hazardous Reactions
None under normal processing.

Hazardous Polymerization Hazardous polymerization does not occur.

Conditions to Avoid
Keep out of reach of children.

Incompatible Materials
Strong alkalis. Bleach. Cyanides. sulfides. Chlorine compounds. Do not mix with other chemicals or cleaners.

Hazardous Decomposition Products
Ammoniacal vapors, Hydrogen Fluoride, Oxides of Nitrogen.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Eye Contact Causes serious eye damage.

Skin Contact Causes skin irritation.

Inhalation Avoid breathing vapors or mists. May cause irritation of respiratory tract.

Ingestion May be harmful if swallowed. Do not taste or swallow. May cause gastrointestinal irritation, nausea, diarrhea, and vomiting.

Component Information

Chemical Name	Oral LD50	Dermal LD50	Inhalation LC50
Water, coloring, fragrance & similar non-hazardous ingredients	> 90 mL/kg (Rat)	-	-
Glycolic Acid 79-14-1	= 1950 mg/kg (Rat)	-	= 7.7 mg/L (Rat) 4 h
Sulfamic acid 5329-14-6	= 1450 mg/kg (Rat)	-	-
Ammonium bifluoride 1341-49-7	= 130 mg/kg (Rat)	-	-
dipropylene glycol monomethyl ether (DPM) 34590-94-8	= 5230 mg/kg (Rat)	= 9500 mg/kg (Rabbit)	-

Information on physical, chemical and toxicological effects

Symptoms Please see section 4 of this SDS for symptoms.

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

Carcinogenicity The table below indicates whether each agency has listed any ingredient as a carcinogen. However, the product as a whole has not been tested.

Chemical Name	ACGIH	IARC	NTP	OSHA
Ammonium bifluoride 1341-49-7		Group 3		

Legend

IARC (International Agency for Research on Cancer)

Group 3 IARC components are "not classifiable as human carcinogens"

Numerical measures of toxicity

Not determined

12. ECOLOGICAL INFORMATION

Ecotoxicity

The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Component Information

Chemical Name	Algae/aquatic plants	Fish	Toxicity to microorganisms	Crustacea
Glycolic Acid 79-14-1		5000: 96 h Brachydanio rerio mg/L LC50 static		
Sulfamic acid 5329-14-6		14.2: 96 h Pimephales promelas mg/L LC50 static		
dipropylene glycol monomethyl ether (DPM) 34590-94-8		10000: 96 h Pimephales promelas mg/L LC50 static		1919: 48 h Daphnia magna mg/L LC50

Persistence/Degradability

Readily biodegradable

Bioaccumulation

Not determined

Mobility

Chemical Name	Partition Coefficient
Glycolic Acid 79-14-1	-1.11
dipropylene glycol monomethyl ether (DPM) 34590-94-8	-0.064

Other Adverse Effects

Not determined

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 Disposal should be in accordance with applicable regional, national and local laws and regulations.

14. TRANSPORT INFORMATION

Note Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

DOT Not regulated

IATA Not regulated

IMDG Not regulated

15. REGULATORY INFORMATION

International Inventories

TSCA All ingredients are listed or exempt from listing on Chemical Substance Inventory
DSL Listed

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*

US Federal Regulations

CERCLA

This material, as supplied, contains one or more substances regulated as a hazardous substance under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302)

Chemical Name	Hazardous Substances RQs	CERCLA/SARA RQ	Reportable Quantity (RQ)
Ammonium bifluoride 1341-49-7	100 lb		RQ 100 lb final RQ RQ 45.4 kg final RQ

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

Chemical Name	CAS No	Weight-%	SARA 313 - Threshold Values %
Ammonium bifluoride - 1341-49-7	1341-49-7	1-7	1.0
dipropylene glycol monomethyl ether (DPM) - 34590-94-8	34590-94-8	1-3	1.0

CWA (Clean Water Act)

This product contains the following substances which are regulated pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42)

Component	CWA - Reportable Quantities	CWA - Toxic Pollutants	CWA - Priority Pollutants	CWA - Hazardous Substances
Ammonium bifluoride 1341-49-7 (1-7)	100 lb			X

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Sulfamic acid 5329-14-6	X		
Ammonium bifluoride 1341-49-7	X	X	X
dipropylene glycol monomethyl ether (DPM) 34590-94-8	X	X	X

16. OTHER INFORMATION

NFPA	**Health Hazards**	**Flammability**	**Instability**	**Special Hazards**
	2	0	0	Not determined
HMIS	**Health Hazards**	**Flammability**	**Physical Hazards**	**Personal Protection**
	2	0	0	Not determined

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Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet