

MATERIAL SAFETY DATA SHEET

1. Product and Company Identification

Product name Dyna Force Concentrated Carpet Detergent
CAS # Mixture
Product use Detergent
Manufacturer Sapphire Scientific
2604 Liberator
Prescott, AZ 86301 US
Phone: 1-800-932-3030
Emergency: 1-800-535-5053

2. Hazards Identification

Emergency overview WARNING
CAUSES EYE IRRITATION.
MAY CAUSE SKIN IRRITATION.

Potential short term health effects

Routes of exposure Eye, Skin contact, Inhalation, Ingestion.

Eyes Causes irritation.

Skin May cause irritation.

Inhalation May cause respiratory tract irritation.

Ingestion May cause stomach distress, nausea or vomiting.

Target organs Eyes. Skin.

Chronic effects Prolonged or repeated exposure to dilutions can cause drying, defatting and dermatitis.

Signs and symptoms Symptoms may include redness, edema, drying, defatting and cracking of the skin. Symptoms of overexposure may be headache, dizziness, tiredness, nausea and vomiting.

OSHA regulatory status This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Potential environmental effects See section 12.

3. Composition/Information on Ingredients

Components	CAS #	Percent
Sodium tripolyphosphate	7758-29-4	40 - 70
Sodium carbonate	497-19-8	15 - 40
Sodium metasilicate pentahydrate	10213-79-3	7 - 13
Diethylene glycol monobutyl ether	112-34-5	3 - 7
Alcohols, C7-21, ethoxylated	68991-48-0	1 - 5
Dimethylnaphthalenesulfonic acid, sodium salt	27178-87-6	1 - 5
Sodium alkylnaphthalene sulfonate	26264-58-4	1 - 5

4. First Aid Measures

First aid procedures

Eye contact Immediately flush with cool water. Remove contact lenses, if applicable, and continue flushing for 15 minutes. Obtain medical attention if irritation develops or persists.

Skin contact Brush away excess of dry material. Flush with water. Obtain medical attention if irritation persists. Remove any contaminated clothing and wash thoroughly with soap and water.

Inhalation If symptoms develop move victim to fresh air. If symptoms persist, obtain medical attention.

Ingestion Do not induce vomiting. Never give anything by mouth if victim is unconscious, or is convulsing. Obtain medical attention.

Notes to physician Symptoms may be delayed.

General advice

If you feel unwell, seek medical advice (show the label where possible). Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves. Show this safety data sheet to the doctor in attendance. Avoid contact with eyes and skin. Keep out of reach of children.

5. Fire Fighting Measures

Flammable properties	Not flammable by WHMIS/OSHA criteria.
Extinguishing media	
Suitable extinguishing media	Alcohol foam. Dry chemical. Carbon dioxide. Water Fog.
Unsuitable extinguishing media	Not available
Protection of firefighters	
Specific hazards arising from the chemical	Not available
Protective equipment and precautions for firefighters	Firefighters should wear full protective clothing including self contained breathing apparatus.
Hazardous combustion products	May include and are not limited to: Oxides of nitrogen. Oxides of phosphorus.
Explosion data	
Sensitivity to mechanical impact	Not available.
Sensitivity to static discharge	Not available.

6. Accidental Release Measures

Personal precautions	Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing.
Environmental precautions	Do not discharge into lakes, streams, ponds or public waters.
Methods for containment	Stop the flow of material, if this is without risk. Prevent entry into waterways, sewers, basements or confined areas.
Methods for cleaning up	Before attempting clean up, refer to hazard data given above. Use broom or dry vacuum to collect material for proper disposal without raising dust. Rinse area with water. Prevent large spills from entering sewers or waterways. Contact emergency services and supplier for advice. After removal flush contaminated area thoroughly with water.

7. Handling and Storage

Handling	Use good industrial hygiene practices in handling this material. Avoid contact with eyes. Avoid contact with skin and clothing. Avoid breathing dust. Wash thoroughly after handling.
Storage	Store in a closed container away from incompatible materials. Keep out of reach of children.

8. Exposure Controls/Personal Protection

Occupational exposure limits**US. ACGIH Threshold Limit Values Components**

Components	Type	Value	Form
Diethylene glycol monobutyl ether (CAS 112-34-5)	TWA	10 ppm	Inhalable fraction and vapor.

Exposure limits	Chemicals listed in section 3 that are not listed here do not have established limit values for ACGIH or OSHA PEL.
Engineering controls	General ventilation normally adequate.
Personal protective equipment	
Eye / face protection	Safety goggles or glasses.
Hand protection	Rubber gloves. Confirm with a reputable supplier first.
Skin and body protection	As required by employer code.

Respiratory protection

Where exposure guideline levels may be exceeded, use an approved NIOSH respirator.

General hygiene considerations

Handle in accordance with good industrial hygiene and safety practice. When using do not eat or drink. Wash hands before breaks and immediately after handling the product.

9. Physical and Chemical Properties

Appearance	Clumping granules
Color	Blue
Form	Solid.
Odor	Mild
Odor threshold	Not available.
Physical state	Solid.
pH	10 (1% solution)
Freezing point	Not available.
Boiling point	Not available.
Pour point	Not available.
Evaporation rate	Not available
Flash point	Not available.
Auto-ignition temperature	Not available.
Flammability limits in air, upper, % by volume	Not available.
Flammability limits in air, lower, % by volume	Not available.
Vapor pressure	Not available.
Vapor density	Not available.
Specific gravity	0.8
Partition coefficient (n-octanol/water)	Not available.
Solubility (water)	Not available.
Relative density	Not available.
Viscosity	Not available.
VOC	Not available
Percent volatile	3

10. Stability and Reactivity

Reactivity	This product may react with strong acids.
Possibility of hazardous reactions	Hazardous polymerization does not occur.
Chemical stability	Stable under recommended storage conditions.
Conditions to avoid	Do not mix with other chemicals.
Incompatible materials	Acids. Oxidizers.
Hazardous decomposition products	May include and are not limited to: Oxides of nitrogen. Oxides of phosphorus.

11. Toxicological Information

Toxicological data

Components	Species	Test Results
Alcohols, C7-21, ethoxylated (CAS 68991-48-0)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	> 2000 mg/kg
<i>Oral</i>		
LD50	Rat	1410 mg/kg

Components	Species	Test Results
LC50		
Not available.		
Diethylene glycol monobutyl ether (CAS 112-34-5)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	2700 mg/kg
<i>Oral</i>		
LD50	Guinea pig	2000 mg/kg
	Mouse	2400 mg/kg
	Rabbit	2200 mg/kg
	Rat	3384 mg/kg
LC50		
Not available.		
Sodium alkylnaphthalene sulfonate (CAS 26264-58-4)		
Acute		
<i>Dermal</i>		
LD50		
<i>Inhalation</i>		
LC50		
<i>Oral</i>		
LD50	Rat	5620 mg/kg
Sodium carbonate (CAS 497-19-8)		
Acute		
<i>Inhalation</i>		
LC50	Guinea pig	400 mg/m3
		0.8 mg/l, 2 Hours
	Mouse	1.2 mg/l, 2 Hours
	Rat	2.3 mg/l, 2 Hours
<i>Oral</i>		
LD50	Rat	4090 mg/kg
Sodium metasilicate pentahydrate (CAS 10213-79-3)		
Acute		
<i>Oral</i>		
LD50	Rat	847 mg/kg
LC50		
Not available.		
Sodium tripolyphosphate (CAS 7758-29-4)		
Acute		
<i>Dermal</i>		
LD50	Rabbit	7940 mg/kg
<i>Oral</i>		
LD50	Rat	3100 mg/kg

Effects of acute exposure

Eye contact	Causes irritation.
Skin contact	May cause irritation.
Inhalation	May cause respiratory tract irritation.
Ingestion	May cause stomach distress, nausea or vomiting.

Sensitization	Non-hazardous by WHMIS/OSHA criteria.
Chronic effects	Non-hazardous by WHMIS/OSHA criteria.
Carcinogenicity	Non-hazardous by WHMIS/OSHA criteria.
Mutagenicity	Non-hazardous by WHMIS/OSHA criteria.
Reproductive effects	Non-hazardous by WHMIS/OSHA criteria.
Teratogenicity	Non-hazardous by WHMIS/OSHA criteria.
Name of Toxicologically Synergistic Products	Not available.

12. Ecological Information

Ecotoxicity	See below		
Ecotoxicological data			
Components		Species	Test Results
Diethylene glycol monobutyl ether (CAS 112-34-5)			
Crustacea	EC50	Daphnia	2850 mg/L, 48 Hours
Aquatic			
Fish	LC50	Bluegill (<i>Lepomis macrochirus</i>)	1300 mg/l, 96 hours
Sodium carbonate (CAS 497-19-8)			
Crustacea	EC50	Daphnia	265 mg/L, 48 Hours
Aquatic			
Crustacea	EC50	Water flea (<i>Ceriodaphnia dubia</i>)	156.6 - 298.9 mg/l, 48 hours
Fish	LC50	Bluegill (<i>Lepomis macrochirus</i>)	300 mg/l, 96 hours
Sodium tripolyphosphate (CAS 7758-29-4)			
Aquatic			
Crustacea	EC50	Water flea (<i>Ceriodaphnia dubia</i>)	238.35 - 321.01 mg/l, 48 hours
Persistence and degradability	Not available.		
Bioaccumulation / Accumulation	Not available		
Mobility in environmental media	Not available.		
Environmental effects	Not available.		
Aquatic toxicity	Not available.		
Partition coefficient			
Diethylene glycol monobutyl ether		0.56	
Chemical fate information	Not available.		

13. Disposal Considerations

Disposal instructions	Review federal, state/provincial, and local government requirements prior to disposal.
Waste from residues / unused products	Not available
Contaminated packaging	Not available

14. Transport Information

U.S. Department of Transportation (DOT)	Not regulated as dangerous goods.
Transportation of Dangerous Goods (TDG - Canada)	Not regulated as dangerous goods.

15. Regulatory Information

Canadian federal regulations	This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.
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Canada NPRI VOCs with Additional Reporting Requirements: Mass reporting threshold/Identification Number

Diethylene glycol monobutyl ether (CAS 112-34-5) 1 tonnes

Canada WHMIS Ingredient Disclosure: Threshold limits

Diethylene glycol monobutyl ether (CAS 112-34-5) 1 %

Sodium carbonate (CAS 497-19-8) 1 %

WHMIS status Controlled

WHMIS classification Class D - Division 2B

WHMIS labeling

**Occupational Safety and Health Administration (OSHA)**

29 CFR 1910.1200 Yes
hazardous chemical

US federal regulations This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

US EPCRA (SARA Title III) Section 313 - Toxic Chemical: De minimis concentration

Diethylene glycol monobutyl ether (CAS 112-34-5) 1.0 % N230

US EPCRA (SARA Title III) Section 313 - Toxic Chemical: Listed substance

Diethylene glycol monobutyl ether (CAS 112-34-5) Listed. N230

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

US CWA Section 311 Hazardous Substances: Listed substance

Sodium tripolyphosphate (CAS 7758-29-4) Listed.

CERCLA Hazardous Substance List (40 CFR 302.4)

Diethylene glycol monobutyl ether (CAS 112-34-5) Listed.

Sodium tripolyphosphate (CAS 7758-29-4) Listed.

US CAA Section 111 Volatile Organic Compounds: Listed substance

Diethylene glycol monobutyl ether (CAS 112-34-5) Listed.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Diethylene glycol monobutyl ether (CAS 112-34-5) Listed.

CERCLA (Superfund) reportable quantity

Sodium tripolyphosphate: 5000

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - Yes
Delayed Hazard - No
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No

State regulations WARNING: This product contains a chemical known to the State of California to cause cancer.

US - California Hazardous Substances (Director's): Listed substance

Sodium tripolyphosphate (CAS 7758-29-4) Listed.

US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance

Naphthalene (CAS 91-20-3) Listed.

US - Illinois Chemical Safety Act: Listed substance

Diethylene glycol monobutyl ether (CAS 112-34-5) Listed.

Sodium tripolyphosphate (CAS 7758-29-4) Listed.

US - Louisiana Spill Reporting List: Reportable quantity (total mass into atmosphere)

Diethylene glycol monobutyl ether (CAS 112-34-5) 100 lbs

US - Louisiana Spill Reporting: Listed substance

Diethylene glycol monobutyl ether (CAS 112-34-5) Listed.

Sodium tripolyphosphate (CAS 7758-29-4) Listed.

US - New Jersey RTK - Substances: Listed substance

Diethylene glycol monobutyl ether (CAS 112-34-5) Listed.

US - New York Release Reporting: Hazardous Substances: Listed substance

Sodium tripolyphosphate (CAS 7758-29-4) Listed.

US - Texas Effects Screening Levels: Listed substance

Diethylene glycol monobutyl ether (CAS 112-34-5) Listed.

Sodium carbonate (CAS 497-19-8) Listed.

Sodium metasilicate pentahydrate (CAS 10213-79-3) Listed.

Sodium tripolyphosphate (CAS 7758-29-4) Listed.

US. Massachusetts RTK - Substance List

Sodium tripolyphosphate (CAS 7758-29-4) Listed.

US. Pennsylvania RTK - Hazardous Substances

Diethylene glycol monobutyl ether (CAS 112-34-5) Listed.

Sodium tripolyphosphate (CAS 7758-29-4) Listed.

US. Rhode Island RTK

Diethylene glycol monobutyl ether (CAS 112-34-5) Listed.

Sodium tripolyphosphate (CAS 7758-29-4) Listed.

Inventory status

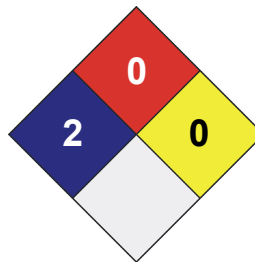
Country(s) or region	Inventory name	On inventory (yes/no)*
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

16. Other Information

LEGEND	
Severe	4
Serious	3
Moderate	2
Slight	1
Minimal	0

HEALTH	/ 2
FLAMMABILITY	0
PHYSICAL HAZARD	0
PERSONAL PROTECTION	X



Disclaimer

Information contained herein was obtained from sources considered technically accurate and reliable. While every effort has been made to ensure full disclosure of product hazards, in some cases data is not available and is so stated. Since conditions of actual product use are beyond control of the supplier, it is assumed that users of this material have been fully trained according to the requirements of all applicable legislation and regulatory instruments. No warranty, expressed or implied, is made and supplier will not be liable for any losses, injuries or consequential damages which may result from the use of or reliance on any information contained in this document.

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Prepared by

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Other information

For an updated MSDS, please contact the supplier/manufacturer listed on the first page of the document.

This MSDS conforms to the ANSI Z400.1/Z129.1-2010 Standard.