

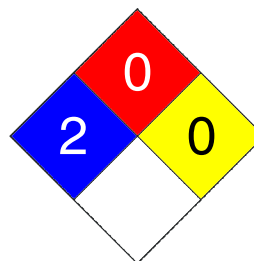
# MATERIAL SAFETY DATA SHEET

## 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

LEGEND HMIS/NFPA	
Severe	4
Serious	3
Moderate	2
Slight	1
Minimal	0

Health	/ 2
Flammability	0
Physical Hazard	0
Personal Protection	B



## 2. Hazards Identification

**Emergency overview** WARNING  
EYE AND SKIN IRRITANT.

**Potential short term health effects**

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

**Eyes** Causes irritation.

**Skin** Causes 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.

## 3. Composition / Information on Ingredients

Ingredient(s)	CAS #	Percent
Sodium metasilicate pentahydrate	10213-79-3	7 - 13
Sodium tripolyphosphate	7758-29-4	30 - 60
Sodium carbonate	497-19-8	15 - 40
Alcohols, C12-15, ethoxylated	68131-39-5	1 - 5
Alcohols, C9-11, ethoxylated	68439-46-3	1 - 5
Diethylene glycol monobutyl ether	112-34-5	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 immediately.

**Skin contact** Brush away excess of dry material. Immediately flush with cool water for 15 minutes. Obtain medical attention if irritation persists. Wash contaminated clothing well before reuse or discard.

<b>Inhalation</b>	If symptoms develop move victim to fresh air. If symptoms persist, obtain medical attention.
<b>Ingestion</b>	Do not induce vomiting. If vomiting occurs naturally, have victim lean forward to reduce risk of aspiration. Never give anything by mouth if victim is unconscious, or is convulsing. Obtain medical attention.
<b>General advice</b>	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

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

## 6. Accidental Release Measures

<b>Personal precautions</b>	Keep unnecessary personnel away. Do not touch or walk through spilled material. Do not touch damaged containers or spilled material unless wearing appropriate protective clothing. Keep people away from and upwind of spill/leak.
<b>Methods for containment</b>	Prevent entry into waterways, sewers, basements or confined areas.
<b>Methods for cleaning up</b>	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.

## 7. Handling and Storage

<b>Handling</b>	Use good industrial hygiene practices in handling this material. Do not get this material in your eyes, on your skin, or on your clothing.
<b>Storage</b>	Keep out of the reach of children. Store in a closed container away from incompatible materials.

## 8. Exposure Controls / Personal Protection

### Exposure limits

Ingredient(s)	Exposure Limits
Alcohols, C12-15, ethoxylated	<b>ACGIH-TLV</b> Not established <b>OSHA-PEL</b> Not established
Alcohols, C9-11, ethoxylated	<b>ACGIH-TLV</b> Not established <b>OSHA-PEL</b> Not established
Diethylene glycol monobutyl ether	<b>ACGIH-TLV</b> Not established <b>OSHA-PEL</b> Not established
Dimethylnaphthalenesulfonic acid, sodium salt	<b>ACGIH-TLV</b> Not established <b>OSHA-PEL</b> Not established
Sodium alkylnaphthalene sulfonate	<b>ACGIH-TLV</b> Not established <b>OSHA-PEL</b> Not established
Sodium carbonate	<b>ACGIH-TLV</b> Not established <b>OSHA-PEL</b> Not established
Sodium metasilicate pentahydrate	<b>ACGIH-TLV</b> Not established <b>OSHA-PEL</b> Not established
Sodium tripolyphosphate	<b>ACGIH-TLV</b> Not established <b>OSHA-PEL</b> Not established

### 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

Use good industrial hygiene practices in handling this material. When using do not eat or drink. Wash hands before breaks and immediately after handling the product.

## 9. Physical and Chemical Properties

<b>Appearance</b>	Clumping granules
<b>Color</b>	Blue
<b>Form</b>	Solid.

<b>Odor</b>	Mild
<b>Odor threshold</b>	Not available
<b>Physical state</b>	Solid
<b>pH</b>	10 1% solution
<b>Melting point</b>	Not available
<b>Freezing point</b>	Not available
<b>Boiling point</b>	Not available
<b>Flash point</b>	Not available
<b>Evaporation rate</b>	Not available
<b>Flammability limits in air, lower, % by volume</b>	Not applicable
<b>Flammability limits in air, upper, % by volume</b>	Not applicable
<b>Vapor pressure</b>	Not available
<b>Vapor density</b>	Not available
<b>Specific gravity</b>	0.8
<b>Octanol/water coefficient</b>	Not available
<b>Auto-ignition temperature</b>	Not available
<b>Percent volatile</b>	3

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## 10. Stability and Reactivity

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<b>Chemical stability</b>	Stable under recommended storage conditions.
<b>Conditions to avoid</b>	Do not mix with other chemicals.
<b>Incompatible materials</b>	Acids. Oxidizers.
<b>Hazardous decomposition products</b>	May include and are not limited to: Oxides of carbon. Oxides of phosphorus.
<b>Possibility of hazardous reactions</b>	Hazardous polymerization does not occur.

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## 11. Toxicological Information

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### Component analysis - LC50

Ingredient(s)	LC50
Alcohols, C12-15, ethoxylated	Not available
Alcohols, C9-11, ethoxylated	5 mg/l/4h rat
Diethylene glycol monobutyl ether	Not available
Dimethylnaphthalenesulfonic acid, sodium salt	Not available
Sodium alkylnaphthalene sulfonate	Not available
Sodium carbonate	400 mg/m <sup>3</sup> guinea pig
Sodium metasilicate pentahydrate	Not available
Sodium tripolyphosphate	Not available

### Component analysis - Oral LD50

Ingredient(s)	LD50
Alcohols, C12-15, ethoxylated	1600 mg/kg rat
Alcohols, C9-11, ethoxylated	1200 mg/kg rat
Diethylene glycol monobutyl ether	2000 mg/kg guinea pig; 3384 mg/kg rat; 2200 mg/kg rabbit
Dimethylnaphthalenesulfonic acid, sodium salt	Not available
Sodium alkylnaphthalene sulfonate	5620 mg/kg rat
Sodium carbonate	4090 mg/kg rat
Sodium metasilicate pentahydrate	Not available
Sodium tripolyphosphate	3100 mg/kg rat

**Effects of acute exposure**

<b>Eye</b>	Causes irritation.
<b>Skin</b>	Causes irritation.
<b>Inhalation</b>	May cause respiratory tract irritation.
<b>Ingestion</b>	May cause stomach distress, nausea or vomiting.
<b>Sensitization</b>	Non-hazardous by WHMIS/OSHA criteria.
<b>Chronic effects</b>	Non-hazardous by WHMIS/OSHA criteria.
<b>Carcinogenicity</b>	Non-hazardous by WHMIS/OSHA criteria.
<b>Mutagenicity</b>	Non-hazardous by WHMIS/OSHA criteria.
<b>Reproductive effects</b>	Non-hazardous by WHMIS/OSHA criteria.
<b>Teratogenicity</b>	Non-hazardous by WHMIS/OSHA criteria.

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## 12. Ecological Information

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**Ecotoxicity** Components of this product have been identified as having potential environmental concerns.

**Ecotoxicity - Freshwater Algae Data**

Diethylene glycol monobutyl ether	112-34-5	96 Hr EC50 Scenedesmus subspicatus: >100 mg/L
Sodium carbonate	497-19-8	120 Hr EC50 Nitzschia: 242 mg/L

**Ecotoxicity - Freshwater Fish Species Data**

Diethylene glycol monobutyl ether	112-34-5	96 Hr LC50 Lepomis macrochirus: 1300 mg/L [static]
Sodium carbonate	497-19-8	96 Hr LC50 Lepomis macrochirus: 300 mg/L [static]
Sodium tripolyphosphate	7758-29-4	48 Hr LC50 Leuciscus idus: 1650 mg/L

**Ecotoxicity - Water Flea Data**

Diethylene glycol monobutyl ether	112-34-5	24 Hr EC50 water flea: 2850 mg/L; 48 Hr EC50 Daphnia magna: >100 mg/L
Sodium carbonate	497-19-8	48 Hr EC50 Daphnia magna: 265 mg/L

<b>Environmental effects</b>	Not available
<b>Aquatic toxicity</b>	Not available
<b>Persistence / degradability</b>	Not available
<b>Bioaccumulation / accumulation</b>	Not available
<b>Partition coefficient</b>	Not available
<b>Mobility in environmental media</b>	Not available
<b>Chemical fate information</b>	Not available
<b>Other adverse effects</b>	Not available

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## 13. Disposal Considerations

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

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## 14. Transport Information

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**U.S. Department of Transportation (DOT)**

Not regulated as dangerous goods.

**Transportation of Dangerous Goods (TDG - Canada)**

Not regulated as dangerous goods.

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## 15. Regulatory Information

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**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.

**Canada - WHMIS - Ingredient Disclosure List**

Diethylene glycol monobutyl ether	112-34-5	1 %
Sodium carbonate	497-19-8	1 %

**US Federal regulations**

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

**U.S. - CERCLA/SARA - Hazardous Substances and their Reportable Quantities**

Diethylene glycol monobutyl ether	112-34-5	1 Lb statutory RQ (no final RQ is being assigned to the generic or broad class. Includes mono- and di- ethers of ethylene glycol, diethylene glycol and triethylene glycol R-(OCH <sub>2</sub> CH <sub>2</sub> ) <sub>n</sub> -OR" where n = 1, 2 or 3, R = alkyl or aryl groups, R" = R h or groups which when removed yield glycol ethers with the structure R-(OCH <sub>2</sub> CH <sub>2</sub> ) <sub>n</sub> -OH. Polymers are excluded from glycol category); 0.454 k
Sodium tripolyphosphate	7758-29-4	5000 Lb final RQ (listed under Sodium phosphate, tribasic); 2270 kg final RQ (listed under Sodium phosphate, tribasic)

**U.S. - CERCLA/SARA - Section 313 - Emission Reporting**

Diethylene glycol monobutyl ether	112-34-5	1.0 Percent de minimis concentration (applies to R-(OCH <sub>2</sub> CH <sub>2</sub> ) <sub>n</sub> -OR' ethers, where n = 1,2, or 3, R=alkyl C7 or less or R = phenyl or alkyl subst. phenyl, R' = H or alkyl C7 or less, or OR' consisting of carboxylic acid ester, sulfate, phosphate, nitrate, or sulfonate, Chemical Category N230)
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**U.S. - CWA (Clean Water Act) - Hazardous Substances**

Sodium tripolyphosphate	7758-29-4	Present
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**Occupational Safety and Health Administration (OSHA)**

**29 CFR 1910.1200 hazardous chemical** Yes

**CERCLA (Superfund) reportable quantity**

Sodium tripolyphosphate: 5000.0000  
 Metaphosphoric acid, hexasodium salt: 5000.0000  
 Oxirane: 10.0000  
 Naphthalene: 100.0000

**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

**Section 302 extremely hazardous substance** No

**Section 311 hazardous chemical** Yes

**Clean Air Act (CAA)** Not available

**Clean Water Act (CWA)** Not available

**WHMIS status** Controlled

**WHMIS classification** Class D - Division 2B

**WHMIS labeling**

**State regulations**

**WARNING:** This product contains a chemical known to the State of California to cause cancer and birth defects or other reproductive harm.

**U.S. - California - 8 CCR Section 339 - Director's List of Hazardous Substances**

Sodium tripolyphosphate	7758-29-4	Present (listed under Sodium phosphate, tribasic)
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**U.S. - Illinois - Toxic Air Contaminants**

Diethylene glycol monobutyl ether	112-34-5	Present
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**U.S. - Louisiana - Reportable Quantity List for Pollutants**

Diethylene glycol monobutyl ether	112-34-5	100 Lb RQ
Sodium tripolyphosphate	7758-29-4	5000 Lb final RQ (listed under Sodium phosphate, tribasic); 2270 kg final RQ (listed under Sodium phosphate, tribasic)

**U.S. - Massachusetts - Right To Know List**

Sodium tripolyphosphate	7758-29-4	Present
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**U.S. - New Jersey - Right to Know Hazardous Substance List**

Diethylene glycol monobutyl ether	112-34-5	sn 2265
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**U.S. - New York - Reporting of Releases Part 597 - List of Hazardous Substances**

Sodium tripolyphosphate	7758-29-4	5000 Lb RQ (air); 100 lb RQ (land/water)
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**U.S. - Pennsylvania - RTK (Right to Know) List**

Diethylene glycol monobutyl ether	112-34-5	environmental hazard
Sodium tripolyphosphate	7758-29-4	Environmental hazard

**Inventory name**

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

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

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## 16. Other Information

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**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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