

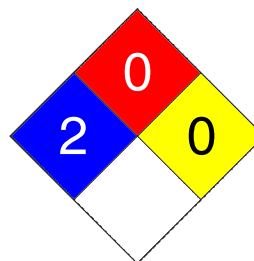
MATERIAL SAFETY DATA SHEET

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.

Inhalation	If symptoms develop move victim to fresh air. If symptoms persist, obtain medical attention.
Ingestion	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.
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	Dry chemical. Alcohol foam. Carbon dioxide.
Unsuitable extinguishing media	Not available
Protection of firefighters	
Specific hazards arising from the chemical	Not available
Protective equipment 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 carbon. 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. 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.
Methods for containment	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.

7. Handling and Storage

Handling	Use good industrial hygiene practices in handling this material. Do not get this material in your eyes, on your skin, or on your clothing.
Storage	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	ACGIH-TLV Not established OSHA-PEL Not established
Alcohols, C9-11, ethoxylated	ACGIH-TLV Not established OSHA-PEL Not established
Diethylene glycol monobutyl ether	ACGIH-TLV Not established OSHA-PEL Not established
Dimethylnaphthalenesulfonic acid, sodium salt	ACGIH-TLV Not established OSHA-PEL Not established
Sodium alkylnaphthalene sulfonate	ACGIH-TLV Not established OSHA-PEL Not established
Sodium carbonate	ACGIH-TLV Not established OSHA-PEL Not established
Sodium metasilicate pentahydrate	ACGIH-TLV Not established OSHA-PEL Not established
Sodium tripolyphosphate	ACGIH-TLV Not established OSHA-PEL 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

Appearance	Clumping granules
Color	Blue
Form	Solid.

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

10. Stability and Reactivity

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 carbon. Oxides of phosphorus.
Possibility of hazardous reactions	Hazardous polymerization does not occur.

11. Toxicological Information

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 ³ 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

Eye	Causes irritation.
Skin	Causes 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.

12. Ecological Information

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

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

13. Disposal Considerations

Waste codes	Not available
Disposal instructions	Review federal, 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.

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 ₂ CH ₂) _n -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 ₂ CH ₂) _n -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 ₂ CH ₂) _n -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

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	No

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

16. Other Information

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.

Issue date

15-Apr-2009

Effective date

01-Apr-2009

Expiry date

01-Apr-2012

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