



---

SECTION 1: PRODUCT AND COMPANY IDENTIFICATION

---

Product Name: DRAGONSHIELD-BC™  
Component: “B”

Company: : Specialty Products, Inc.  
2410 104<sup>th</sup> Street Ct S Ste D  
Lakewood, WA 98499  
Phone: 800-627-0773  
Fax: 253-588-7196

**EMERGENCY CONTACT:** For Spills, Leaks, Fire or Exposure call **CHEMTREC**  
Toll Free: 800.424.9300  
International Calls: 703.527.3887  
Fax: 913.321.1490

---

SECTION 2: COMPOSITION/INFORMATION ON INGREDIENTS

---

<u>Name</u>	<u>CAS#</u>	<u>% W</u>
Polyoxypropylenediamine	9046-10.0	61 - 89
Polyoxyalkyleneamine	64852-22-8	10 - 40
Amine Modified Polyol	N/A	1 - 2

\*No toxic chemical(s) subject to the reporting requirements of Section 313 of Title III an of 40 CFR 372.  
Information concerning non-hazardous ingredients is considered a Trade Secret.

---

SECTION 3: HAZARDS IDENTIFICATION

---

OSHA/HCS Status: This material is considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Emergency Overview: **Danger!**  
**CAUSES EYE AND SKIN BURNS.**  
**HARMFUL OR FATAL IF SWALLOWED.**  
**CAUSES RESPIRATORY TRACT IRRITATION AND CAN CAUSE DAMAGE.**

Toxic if swallowed. Corrosive to eyes and skin. Causes burns. Irritating to respiratory system. Do not breathe vapor or mist. Do not ingest. Do not get in eyes, skin, or clothing. Use only with adequate ventilation. Keep container tightly closed and sealed until ready for use. Wash thoroughly after handling. Repeated skin contact may cause a persistent irritation or dermatitis. Repeated inhalation may cause lung damage. Overexposure to vapor, dust or mist may aggravate existing respiratory conditions, such as asthma, bronchitis, and inflammatory or fibrotic respiratory disease.

Section 3 Notes: **[Read the entire MSDS for a more thorough evaluation of the hazards.](#)**

---

SECTION 4: FIRST AID MEASURES

---

Eye Contact:	Obtain medical attention immediately. Continue flushing for an additional 15 minutes if medical attention is not immediately available. Causes eye irritation, experienced as pain with excess blinking and tear production, extreme redness and swelling of the eye, and chemical burns of the eye. Severe eye damage can cause blindness. Immediately flush eyes with large amounts of running water for at least 15 minutes. Hold eyelids apart while flushing to rinse entire surface of eye and lids with water. Do not attempt to neutralize with chemical agents.
Skin Contact:	Immediately remove contaminated clothing and shoes. Under a safety shower, flush skin thoroughly with large amounts of running water for at least 15 minutes. Do not attempt to neutralize with chemical agents. Get medical attention immediately. Discard or decontaminate clothing and shoes before reuse. Causes severe irritation with pain, excessive redness, and swelling with chemical burns, blister formation, and possible tissue destruction. Other than potential skin irritation effects noted above, acute (short term) adverse effects are not expected from brief skin contact; see other effects, below, and Section 11 for information regarding potential long term effects.
Ingestion:	If person is conscious and can swallow, immediately give two glasses of water (16 oz.) but do not induce vomiting. This material is corrosive. If vomiting occurs, give fluids again. Have a physician determine if condition of patient will permit induction of vomiting or evacuation of stomach. Do not give anything by mouth to an unconscious or convulsing person. Causes burning of mouth, throat, and stomach with abdominal and chest pain, nausea, vomiting, diarrhea, thirst, weakness, and collapse. Aspiration may occur during swallowing or vomiting, resulting in lung damage.
Inhalation:	If inhaled, remove to fresh air. If not breathing or in respiratory distress, clear person's airway and start artificial respiration. With a physician's advice, give supplemental oxygen using a bag-valve mask or manually triggered oxygen supply. Vapors or mist, especially as generated from heating the material or as from exposure in poorly ventilated areas or confined spaces, are irritating and cause nasal discharge, coughing, and discomfort in nose and throat. Prolonged or repeated overexposure may result in lung damage.
Other Instructions:	Swallowing of this corrosive material may result in severe ulceration, inflammation, and possible perforation of the upper alimentary tract, with hemorrhage and fluid loss. Aspiration of this product during induced emesis can result in severe lung injury. If evacuation of stomach is necessary, use method least likely to cause aspiration, such as gastric lavage after endotracheal intubation. Contact a Poison Control Center for additional treatment information.

---

SECTION 5: FIRE-FIGHTING MEASURES

---

Flash Point:	Closed cup: >365°F (185°C).
<u>Extinguishing Media:</u> Suitable:	Use water spray, dry chemical, foam, or carbon dioxide to extinguish flames. Use water spray to cool fire-exposed containers. Water or foam may cause frothing.

Not Suitable:	None known.
Special Exposure Hazards:	No Specific Hazard.
Special Protective Equipment for Firefighters:	Wear special chemical protective clothing and positive pressure self-contained breathing apparatus. Approach fire from upwind to avoid hazardous vapors and toxic decomposition products. Decontaminate or discard any clothing that may contain chemical residues.

---

**SECTION 6: ACCIDENTAL RELEASE MEASURES**

---

Accidental Release Measures:	For major spills call <b>CHEMTREC</b> Toll Free 1.800.424.9300 or for International call 1.703.527.3887.
Personal Precautions:	Immediately contact emergency personnel. Keep unnecessary personnel away. Use suitable protective equipment.
Environmental Precautions:	Avoid dispersal of spilled material, runoff, and contact with soil, waterways, drains, and sewers.
Methods for Cleaning Up:	Ventilate area. Avoid breathing vapor. Wear appropriate personal protective equipment, including appropriate respiratory protection. Contain spill if possible. Wipe up or absorb with suitable material and shovel up. Prevent entry into sewers and waterways. Avoid contact with skin, eyes, or clothing.

---

**SECTION 7: HANDLING AND STORAGE**

---

General:	Ideal storage temperature is 60-90°F (15-32°C). Handling and storage should be in accordance with Local, State/Provincial, or Federal regulations.
Handling:	Put on appropriate personal protective equipment (see Section 8). Eating, drinking, and smoking should be prohibited in areas where this material is handled, stored, and processed. Workers should wash hands and face before eating, drinking, and smoking. Eye wash and safety shower should be available nearby when this product is handled or in use. Do not get in eyes or on skin or clothing. Do not breathe vapor or mist. Do not ingest. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Keep in the original container or an approved alternative made from a compatible material, kept tightly closed when not in use. Empty containers retain product residue and can be hazardous. Do not reuse container.
Storage:	Store in accordance with local regulations. Store in original container protected from direct sunlight in a dry, cool, and well-ventilated area, away from incompatible materials (see Section 10), food, and drink. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabeled containers. Use appropriate containment to avoid environmental contamination. Periods of exposure to high temperatures should be minimized. Water contamination should be avoided. If stored above 100°F, a nitrogen atmosphere is recommended.

---

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

---

Consult local authorities for acceptable exposure limits.

Preventive Measures:	Conditions of use, adequacy of engineering or other control measures, and actual exposures will dictate the need for specific protective devices at your workplace.
Engineering Controls:	Use local exhaust ventilation to maintain airborne concentrations below the TVL. Suitable respiratory equipment should be used in cases of insufficient ventilation or where operational procedures demand it. For guidance on engineering control measures refer to publications such as the ACGIH current edition of 'Industrial Ventilation, a Manual of Recommended Practice.'
<u>Personal Protection</u> Eye Protection:	Avoid eye contact. Chemical type goggles with face shield must be worn. Do not wear contact lenses.
Skin Protection:	Protective clothing such as coveralls or lab coats must be worn. Launder or dry-clean when soiled. Gloves resistant to chemicals and petroleum distillates required. When handling large quantities, impervious suits, gloves, and rubber boots must be worn. Workers should wash exposed skin several times daily with soap and water. Soiled work clothing should be laundered or dry-cleaned.
Respiratory Protection:	Use a properly fitted, air-purifying, or air-fed respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product, and the safe working limits of the selected respirator. Airborne concentrations should be kept to lowest levels possible. If vapor, mist, or dust is generated and the occupational exposure limit of the product, or any component of the product, is exceeded, use appropriate NIOSH or MSHA approved air purifying or air supplied respirator after determining the airborne concentration of the contaminant. Air supplied respirators should always be worn when airborne concentrations of the contaminant or oxygen concern is unknown.
Hands:	Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.
Work Hygienic Practices:	Follow the usual precautionary measures for handling chemicals. Keep away from food and beverages. Immediately remove all soiled and contaminated clothing. Avoid contact with eyes, skin, and clothing. Wash hands after use. Wash all contaminated clothing and shoes before reuse.

---

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

---

General Appearance Information

Physical State:	Liquid
Color:	Various colors
Odor:	Ammonia-like odor
Odor Threshold:	Not available

Important Health, Safety and Environmental Information

pH:	10.5
Boiling Point:	Not determined
Melting/Freezing Point:	Not applicable

Flash Point: Closed Cup: >365°F (185°C)  
Oxidizing Properties: Not available  
Relative Density: 0.99  
Solubility: Partially soluble in water.  
Very slightly soluble in methanol.  
Viscosity: Kinematic: 2.48 cm<sup>2</sup>/s (248 cSt at 25°C)  
Vapor Density: Not available  
Volatile Organic Compounds (VOC): 0 grams/liter

---

#### SECTION 10: STABILITY AND REACTIVITY

---

Stability and Reactivity: The product is stable.  
Incompatibility Will react with acids.  
(Materials to Avoid):  
Products Evolved When Subjected to Heat or Combustion: Toxic levels of ammonia, combustion products of nitrogen, carbon monoxide, carbon dioxide, irritating aldehydes, and ketones may be formed on burning in a limited air supply.  
Hazardous Polymerization: Do not occur

---

#### SECTION 11: TOXICOLOGICAL INFORMATION

---

##### Toxicity Data

##### Animal Toxicity Data

Polyoxypropylendediamine: Oral:  
LD50 2.69 g/kg (rat) slightly toxic  
Inhalation:  
Not Determined  
Dermal:  
LD50 > 12.50 g/kg (rabbit) practically non-toxic

Polyoxyalkyleneamine: Oral:  
LD50 .48 g/kg (rat) toxic  
Inhalation:  
Not determined  
Dermal:  
LD50 2.09 g/kg (rabbit) practically non-toxic

##### Irritation Index, Estimation of Irritation (Species)

Polyoxypropylendediamine: Skin:  
(Draize) 2.90 / 8.0 (rabbit) slightly irritating  
Eyes:  
(Draize) 85.60 / 110 (rabbit) extremely irritating  
Sensitization:  
(Buehler) Negative - skin (guinea pig)

Polyoxyalkyleneamine: Skin:  
(Draize) 6.50 - 8.00/8.0 (rabbit) corrosive  
Eyes:

(Draize) 80.00 / 110 (rabbit) extremely irritating  
Sensitization:  
Not determined

Other None

---

SECTION 12: ECOLOGICAL INFORMATION

---

NO DATA AVAILABLE

---

SECTION 13: DISPOSAL CONSIDERATIONS

---

Waste Disposal Method: The generation of waste should be avoided or minimized wherever possible. Avoid disposal of spilled material into soil, waterways, drains, and sewers. Do not discharge into waterways or sewer system without proper regulatory authorization. Disposal of this product and any related waste by-products must be handled in accordance with Federal, State, and local environmental regulations. Wastes must be tested using methods described in 40 CFR 261.7 to determine if it meets applicable definitions of hazardous waste.

Empty Container Disposal: Empty containers must be disposed of at a Resource Conservation and Recovery Act (RCRA) licensed facility, handled via an approved, certified drum recycler/disposal service, or decontaminated using approved methods described/mandated by Federal, State, Local waste disposal authority requirements and disposed of accordingly.

Contact supplier if guidance is required.

---

SECTION 14: TRANSPORTATION INFORMATION

---

EMERGENCY CONTACT: For Spills, Leaks, Fire or Exposure call **CHEMTREC**  
Toll Free: 800.424.9300  
International Calls: 703.527.3887

DOT Classification

Proper Shipping Name: Amines, liquid, Corrosive, N.O.S., (Polyoxypropylenediamine)  
Hazard Class: 8  
UN Number: UN2735  
Packing Group: III

TDG Classification

Proper Shipping Name: Amines, liquid, Corrosive, N.O.S., (Polyoxypropylenediamine)  
Hazard Class: 8  
UN Number: UN2735  
Packing Group: III

IMDG Class

Proper Shipping Name: Amines, liquid, Corrosive, N.O.S., (Polyoxypropylenediamine)  
Hazard Class: 8  
UN Number: UN2735  
Packing Group: III

IATA-DGR Class

Proper Shipping Name: Amines, liquid, Corrosive, N.O.S., (Polyoxypropylenediamine)  
 Hazard Class: 8  
 UN Number: UN2735  
 Packing Group: III

**SECTION 15: REGULATORY INFORMATION**

United States

HCS Classification: Toxic Material  
 Corrosive Material

US Federal Regulations: **United States Inventory (TSCA 8b):** All components are listed or exempted.

CERCLA: Hazardous Substances No ingredients listed.

SARA 313 No ingredients listed.  
 This product does not contain nor is it manufactured with ozone depleting substances.

California Prop 65 No ingredients listed.

Canada

WHMIS: Class D-1B: Material causing immediate and serious toxic effects (toxic).  
 Class E: Corrosive material.

CEPA: **Canada Inventory:** All components are listed or exempted.

This product has been classified according to the hazard criteria of the CPR and the MSDS contains all the information required by the CPR.

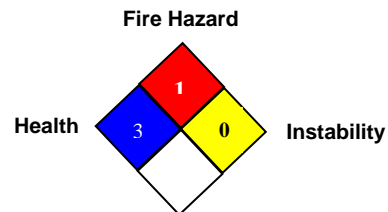
**SECTION 16: OTHER INFORMATION**

Label Requirements: CAUSES EYE AND SKIN BURNS.  
 HARMFUL IF SWALLOWED.  
 CAUSES RESPIRATORY TRACT IRRITATION.

HAZARDOUS MATERIAL INFORMATION SYSTEM (U.S.A.)

Health	3
Fire Hazard	1
Reactivity	0

NATIONAL FIRE PROTECTION ASSOCIATION (U.S.A.)



**MATERIAL SAFETY DATA SHEET**

DRAGONSHIELD-BC™ — Component "B"

Revised Date: 10/11/12

Page 8 of 8

For Your Protection:

The information and recommendations in this publication is to the best of our knowledge, reliable. The toxicity and risk characteristics of products made by **Specialty Products, Inc.** will necessarily differ from the toxicity and risk characteristics that occur when such products are used with other materials during a manufacturing process. The resulting risk characteristics should be determined and made known to ultimate end-users and processors. The user is responsible to comply with all applicable federal, provincial or municipal laws and regulations. **Specialty Products, Inc. MAKES NO WARRANTIES OF ANY KIND, EXPRESSED OR IMPLIED, INCLUDING THOSE OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE.**

Preparation Information:

This MSDS supersedes ALL previous MSDS versions.