

Issue Date: 14-July-2015

Revision Date: 14-September-2015

Version 1

### 1. IDENTIFICATION

#### Product Identifier

**Product Name** DYNA GUARD BA

#### Other means of identification

**SDS #** DYNA-005

**Product Code** None

#### Recommended use of the chemical and restrictions on use

**Recommended use** Rust Prevention/Inhibitor

**Restrictions on use** Industrial use only

#### Details of the supplier of the safety data sheet

##### Manufacturer Address

Company Name: DYNA TECH Chemical Specialties, Inc.

Address: P. O. Box 34  
Colgate, WI 53017

Telephone: 262-646-7600

Fax: 262-820-9176

**Emergency Telephone Number (24 hours/day):** INFOTRAC 1-352-323-3500 (International)  
1-800-535-5053 (North America)

### 2. HAZARDS IDENTIFICATION

#### Hazard Classification

Acute Hazards to the Aquatic Environment	Category 3
Acute Toxicity (Oral)	Category 4
Acute Toxicity (Dermal)	Category 4
Acute Toxicity (Inhalation)	Category 4
Skin Corrosion	Category 1B
Skin Irritation	Category 1B
Target Organ Toxicity (Single exposure)	Category 3
Reproductive Toxicity	Category 2
Aquatic Toxicity	Category 3

#### Label Elements

**Physical State:** Liquid



Exclamation  
Mark



Health  
Hazard



Corrosion

#### Signal Word

**Danger**

**Hazard Statements**

Harmful if inhaled.  
 Causes severe skin burns and eye damage.  
 May cause damage to organs through prolonged or repeated exposure.  
 Suspected of damaging fertility or the unborn child.  
 Harmful if swallowed.  
 Harmful in contact with skin.  
 Harmful to aquatic life with long lasting effects.  
 May cause damage to organs (Gastrointestinal System and Respiratory System).

**Precautionary Statements-Prevention**

Use only outdoors or in a well-ventilated area.  
 Do not breathe dust/fume/gas/mist/vapors/spray.  
 Wear protective gloves/protective clothing/eye protection/face protection.  
 Wash exposed area thoroughly after handling.

**Precautionary Statements-Response**

Immediately call a POISON CENTER or doctor/physician.  
 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.  
 Continue rinsing.  
 IF ON SKIN (or hair): Remove/take off all contaminated clothing immediately. Rinse skin with water/shower.  
 IF INHALED: Remove to fresh air and keep at rest in a position comfortable for breathing.  
 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.

**Precautionary Statements-Storage**

Store in a well-ventilated place. Keep container tightly closed.  
 Store in corrosive resistant container with a resistant inner liner.  
 Store locked up.

**Precautionary Statements-Disposal**

Dispose of contents/container in accordance with local/regional/national/international regulations.

**Potential Health Effects**

**EYES:** Dust or mist may cause irritation with possible severe burns and destruction to the eyes, may cause blindness.

**SKIN:** Dust or mist may cause irritation with possible severe burns to the skin.

**INGESTION:** Will cause severe burns to all tissues when contact is made, may be fatal.

**INHALATION:** Dust or mist may cause irritation with possible severe burns and destruction to the upper respiratory tract and lungs.

### 3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	Wt.%	CAS
Boric Acid	1 - 10	10043-35-3
Ethanol, 2-amino-	1 - 10	141-43-5
Ethanol, 2, 2', 2''-nitritoltris	< 5	102-71-6

**COMMENTS:** If Chemical Name/CAS No is "proprietary" and/or Weight % is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.

### 4. FIRST-AID MEASURES

**EYES:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists, get medical advice/attention.

**SKIN:** Remove contaminated clothing. Wash exposed area with water. Seek immediate medical attention. Chemical burns must be treated by a physician. Wash contaminated clothing before reuse.

**INGESTION:** Do Not Induce Vomiting!! Never give anything by mouth to an unconscious person. If conscious, wash out mouth with water. If possible, do not leave individual unattended. Seek immediate attention.

**INHALATION:** Remove victim to fresh air and keep at rest in a position comfortable for breathing. If it is suspected that gas or vapor is still present, the rescuer should wear an appropriate mask or self-contained breathing apparatus. If not breathing, if breathing is irregular, or if respiratory arrest occurs, provide artificial respiration or oxygen by trained personnel. It may be dangerous to the person providing aid to give mouth-to-mouth resuscitation. Get medical attention. If necessary, call a poison center or physician. If unconscious, place in recovery position and get medical attention immediately. Maintain an open airway. Loosen tight clothing such as a collar, tie, belt or waistband.

**NOTES TO PHYSICIAN:** Treat symptomatically.

**ADDITIONAL INFORMATION:** Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

## 5. FIRE-FIGHTING MEASURES

**GENERAL HAZARD:** Do not release runoff from fire control methods to sewers or waterways.

**EXTINGUISHING MEDIA:** Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

**FIRE FIGHTING PROCEDURES:** Use standard firefighting procedures and consider the hazards of other involved materials. Wear self-contained breathing apparatus and protective clothing to prevent contact with skin and eyes. Keep unopened containers cool and spray with water. Exercise caution when fighting any chemical fire.

**FIRE FIGHTING EQUIPMENT:** As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

## 6. ACCIDENTAL RELEASE MEASURES

**SMALL SPILL:** Corrosive material. Evacuate unprotected personnel from area. Wear protective equipment. Absorb liquid with sand or other noncombustible absorbent material. Stop spill at source. Prevent from spreading. Move containers from spill area. Maintain adequate ventilation. Never exceed any occupational exposure limit. Contain spill, place into drums for proper disposal. Place in non-leaking containers for immediate disposal. Flush remaining area with water and neutralize with Soda Ash, Lime or Limestone and dispose of properly. Adequate ventilation is required if Soda Ash is used, because of the consequent release of carbon dioxide gas. Avoid direct discharge to sewers and surface waters. Notify authorities if entry occurs. Take collected spill to proper disposal plant. Wash clothing and equipment after handling.

**LARGE SPILL:** See "Small Spill" above.

### ENVIRONMENTAL PRECAUTIONS

**WATER SPILL:** Avoid dispersal of spilled material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air). Water polluting material – may be harmful to the environment if released in large quantities.

**LAND SPILL:** Contain released substance, pump into suitable containers. Plug leak, cut off the supply. Knock down/dilute dust cloud with water spray. Violent exothermic reaction with some acids – release of harmful gases/vapors (carbon dioxide). Carbon dioxide is heavier than air and will collect in ducts, drains and low lying areas. Prevent dust cloud formation. Scoop solid soil spill into closing containers. Clean contaminated surfaces with excess of water. Wash clothing and equipment after handling.

**AIR SPILL:** See "Water Spill" above.

### GENERAL PROCEDURES

**PERSONAL PRECAUTIONS:** Keep unnecessary personnel away. Keep people away from and upwind of spill/leak. Keep out of low areas. Wear appropriate protective equipment and clothing during spill clean-up. Do not touch damaged containers or spilled materials unless wearing appropriate protective clothing. Ensure adequate ventilation. Local authorities should be advised if significant spillages cannot be contained.

**SPECIAL PROTECTIVE EQUIPMENT:** Use personal protective equipment as required.

#### COMMENTS

**Methods and material for containment and cleaning up:** Should not be released into the environment.

**Large spills:** Dike far ahead of liquid spill for later disposal. Use a non-combustible material like vermiculite, sand or earth to soak up the product and place into a container for later disposal.

**Small spills:** Absorb spill with vermiculite or other inert material. Clean contaminated surface thoroughly. After removal flush contaminated area thoroughly with water.

Never return spills in original container for re-use.

### 7. HANDLING AND STORAGE

**HANDLING:** Wear protective clothing with chemical safety goggles and/or face shields with safety goggles. Use self-contained breathing apparatus if necessary. Do not use in poorly ventilated or confined spaces. When making solutions, heat may be generated. Add slowly to surfaces of solution while stirring to avoid splattering. Never use pressure to empty containers. Empty containers may contain explosive vapors or dangerous residues. Do not cut, puncture, or weld on or near container. All labeled hazardous precautions must be observed. Do not reuse empty container without commercial cleaning or reconditioning. FOR PERSONAL PROTECTION SEE SECTION 8.

**STORAGE:** Store in cool, well-ventilated area away from heat and out of direct sunlight. Do not store open, unlabeled, mislabeled, or empty containers. Keep containers tightly closed. Store away from incompatible materials. Do not eat, drink, or smoke in work area.

### 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

#### EXPOSURE GUIDELINES

OSHA HAZARDOUS COMPONENTS (29 CFR1910.1200)							
		EXPOSURE LIMITS					
		OSHA PEL		ACGIH TLV		Supplier OEL	
Chemical Name		ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>	ppm	mg/m <sup>3</sup>
Ethanol, 2-amino-	TWA	3	6	3	7.5	NL	NL
	STEL			6	15	NL	NL

**ENGINEERING CONTROLS:** Provide general or local exhaust ventilation systems to maintain airborne concentrations below OSHA PELs (Sec. 2). Local exhaust ventilation is preferred because it prevents contaminant dispersion into the work area by controlling it at its source.

#### PERSONAL PROTECTIVE EQUIPMENT

**EYES AND FACE:** Wear appropriate protective eye glasses, or chemical safety goggles while handling this product as described by OSHA's eye and face protection regulations in 29 CFR 1910.133. Wear additional eye protection such as a face shield when the possibility exists for eye contact with splashing or spraying liquid or airborne material.

**SKIN:** Avoid skin contact. Wear gloves impervious to conditions of use. Additional protection may be necessary to prevent skin contact including use of apron, face shield, boots or full body protection. A safety shower should be located in the work area.

**RESPIRATORY:** If exposure limits are exceeded, NIOSH approved respiratory protection should be worn. A NIOSH approved respirator for organic vapors is generally acceptable for concentrations up to 10 times the PEL. For higher concentrations, unknown concentrations, and for oxygen deficient atmospheres, use a NIOSH approved air-supplied respirator. Engineering controls are the preferred mean for controlling chemical exposure. Respiratory protection may be needed for non-routine or emergency situations. Respiratory protection must be provided with OSHA 29 CFR 1910.134.

**PROTECTIVE CLOTHING:** Wear suitable protective clothing.

**WORK HYGIENIC PRACTICES:** Always observe good hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

**OTHER USE PRECAUTIONS:** Facilities storing or utilizing this material should be equipped with an eyewash station and a safety shower.

## 9. PHYSICAL AND CHEMICAL PROPERTIES

<b>Physical State:</b>	Liquid
<b>Odor:</b>	Mild
<b>Appearance:</b>	Clear liquid
<b>Color:</b>	Transparent
<b>pH:</b>	Alkaline
<b>Percent Volatile:</b>	Not yet determined
<b>Flash Point and Method:</b>	Not yet determined
<b>Auto Ignition Temperature:</b>	Not yet determined
<b>Vapor Pressure</b>	Not yet determined
<b>Vapor Density:</b>	Not yet determined
<b>Boiling Point:</b>	212°F
<b>Freezing Point:</b>	Not yet determined
<b>Melting Point:</b>	None
<b>Pour Point:</b>	Not yet determined
<b>Thermal Decomposition:</b>	Not yet determined
<b>Solubility in Water:</b>	100%
<b>Evaporation Rate:</b>	Not yet determined
<b>Density</b>	Not yet determined
<b>Specific Gravity:</b>	Not yet determined

## 10. STABILITY AND REACTIVITY

<b>Reactivity:</b>	Not reactive during normal conditions.
<b>Hazardous Polymerization:</b>	Does not occur.
<b>Stability:</b>	Stable under recommended storage conditions.
<b>Conditions to Avoid:</b>	Boiling water, dilution – add product slowly to water, not water to product.
<b>Possibility of Hazardous Reactions:</b>	None under normal processing.
<b>Hazardous Decomposition Products:</b>	Under normal operating measure, hazardous decompositions should not be produced.
<b>Incompatible Materials:</b>	Acids, Oxidizers, Cyanides.

## 11. TOXICOLOGICAL INFORMATION

### ACUTE

**EYES:** Corrosive. Causes severe eye damage which can result in severe irritation, pain and burns, and permanent damage, including blindness.

**SKIN ABSORPTION:** Corrosive. Causes severe skin burns. Prolonged or repeated skin exposure can result in dermatitis.

**ORAL LD50:** Corrosive. May cause severe mucus membrane burns and gastrointestinal burns. If swallowed, may pose a lung aspiration hazard during vomiting. Lung aspiration may result in chemical pneumonitis, pulmonary edema, and damage to lung tissue or death.

**INHALATION LC50:** Corrosive. May cause severe irritation of the respiratory tract with coughing, choking, pain with possibly burns of mucus membranes. This material can be extremely destructive to the tissue of the mucus membranes and respiratory systems.

**CARCINOGENICITY**

**Notes:** Borax is considered to be a human carcinogen when in respirable form (dust / powder).

**REPRODUCTIVE EFFECTS**

**REPRODUCTIVE TOXICITY:** Sodium Borate – Sodium borate and boric acid interfere with sperm production, damage the testes and interfere with male fertility when given to animals by mouth at high doses. Boric acid produces developmental effects, including reduced body weight, malformations and death in the offspring of pregnant animals given boric acid by mouth.

The above mentioned animals studies were conducted under exposure conditions leading to doses many times in excess of those that could occur through product use or inhalation of dust in occupational settings. Moreover, a human study of occupational exposure to sodium borate or boric acid dusts showed no adverse effect on fertility.

**12. ECOLOGICAL INFORMATION****ENVIRONMENTAL DATA**

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.

**BIOACCUMULATION/ACCUMULATION**

**Mobility in soil:** Soil/water partition coefficient (KOC): 1.167

**GENERAL COMMENTS**

**Persistence and Degradability:** Biodegradable

**Mobility:** Will likely be mobile in the environment due to its water solubility.

**13. DISPOSAL CONSIDERATIONS****DISPOSAL METHOD:**

Product should be disposed in an environmentally safe manner in accordance with local, state and federal regulations.

**PRODUCT DISPOSAL:**

Contact your supplier or a licensed contractor for detailed recommendations.

Follow applicable Federal, state, and local regulations.

**EMPTY CONTAINER:**

'Empty' containers retain residue (liquid and/or vapor) and may be dangerous.

**DO NOT PRESSURIZE, CUT, WELD, BRAZE, SOLDER, DRILL, GRIND, OR EXPOSE SUCH CONTAINERS TO HEAT, FLAME, SPARKS, OR OTHER SOURCES OF IGNITION – THEY MAY EXPLODE AND CAUSE INJURY OR DEATH.**

Do not attempt to clean since residue is difficult to remove.

'Empty' drums should be completely drained, properly bunged, and should be disposed of in an environmentally safe manner and in accordance with local, state, and governmental regulations.

For work on tanks, please refer to Occupational Safety and Health Administration regulations, ANSI Z49.1, and other governmental and industrial references pertaining to cleaning, repairing, welding, or other governmental and industrial contemplated operations.

**RCRA/EPA WASTE INFORMATION:**

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

**14. TRANSPORT INFORMATION****DOT (DEPARTMENT OF TRANSPORTATION)**

**PROPER SHIPPING NAME:** CORROSIVE LIQUID, BASIC, INORGANIC, N.O.S. (CONTAINS MONOETHANOLAMINE) 8, PGII, ERG#154

**TECHNICAL NAME:** DYNA GUARD BA**PRIMARY HAZARD CLASS/DIVISION:** 8**UN/NA NUMBER:** 3266**PACKING GROUP:** II**OTHER SHIPPING INFORMATION:** Please see current shipping paper for most up-to-date shipping information, including exemptions and special circumstances.**ROAD AND RAIL (ADR/RID)****PROPER SHIPPING NAME:** Not yet determined**AIR (ICAO/IATA)****SHIPPING NAME:** Not yet determined**VESSEL (IMO/IMDG)****SHIPPING NAME:** Not yet determined**15. REGULATORY INFORMATION****UNITED STATES****DOT LABEL SYMBOL AND HAZARD CLASSIFICATION**

Corrosive

**SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)****HAZARD CATEGORIES:** Acute and Chronic Health Hazard**REPORTABLE INGREDIENTS:** Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations.**CERCLA (COMPREHENSIVE ENVIRONMENTAL RESPONSE, COMPENSATION, AND LIABILITY ACT)****CERCLA REGULATORY:** This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355).**TSCA (TOXIC SUBSTANCE CONTROL ACT)**

Chemical Name	CAS
Boric Acid	10043-35-3
Ethanol, 2-amino-	141-43-5
Ethanol, 2, 2', 2''-nitrilotris	102-71-6

**TSCA REGULATORY:** Listed**CLEAN WATER ACT:** This product does not contain any substances regulated as pollutants to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

**16. OTHER INFORMATION**

**Issue Date:** 14-July-2015  
**Revision Date:** 14-September-2015  
**Revision Note:** New format

**HMIS RATING**

<b>HEALTH</b>	<input type="checkbox"/>	<b>2</b>
<b>FLAMMABILITY</b>		<b>0</b>
<b>PHYSICAL HAZARD</b>		<b>0</b>
<b>PERSONAL PROTECTION</b>		<b>X</b>

**ADDITIONAL SDS INFORMATION****ABBREVIATION AND ACRONYMS:**

ACGIH - American Conference of Government Industrial Hygienists  
CAS - Chemical Abstract Service number  
DOT - U.S. Department of Transportation  
IDLH - Immediately dangerous to life and health  
N.A. - Not Available  
NIOSH - National Institute of Occupational Safety and Health  
NTP - *National Toxicology Program*  
OSHA - Occupational Safety and Health Administration  
PEL - Permissible exposure Limit  
ppm - Parts per million  
RRA - Resource Conservation and Recovery Act  
TLV - Threshold Limit Value  
TSCA - Toxic Substances Control Act

**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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. This information should be used to make an independent determination of the methods to safeguard workers and the environment. 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**