SAFETY DATA SHEET

Date Prepared : 05/05/2015 SDS No : Bio-Shine Inc._Formula HD

Formula HD

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Formula HD **GENERAL USE:** Cleaner/degreaser for heavy industrial soils. **PRODUCT DESCRIPTION:** Extra Duty Cleaner Degreaser **CHEMICAL FAMILY:** Solvent/detergent blend

DISTRIBUTOR

Bio-Shine Inc. 190 Summerhill Road Spotswood, NJ 08884 **Customer Service:** 732-251-9506

24 HR. EMERGENCY TELEPHONE NUMBERS

CHEM-TEL (Medical and Transportation): 800-255-3924 POISON CONTROL CENTER (Medical): 800-222-1222

2. HAZARDS IDENTIFICATION

GHS CLASSIFICATIONS

Health:

Eye Irritation, Category 2A Skin Irritation, Category 2B

GHS LABEL



SIGNAL WORD: WARNING

HAZARD STATEMENTS

H319: Causes serious eye irritation.

H315: Causes skin irritation.

H303: May be harmful if swallowed.

PRECAUTIONARY STATEMENT(S)

Prevention:

P273: Avoid release to the environment.

P262: Do not get in eyes, on skin, or on clothing.

P233: Keep container tightly closed.

P102: Keep out of reach of children.

P280: Wear protective gloves/protective clothing/eye protection/face protection.

Response:

P305+P351+P338: IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P301+P312: IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

P332+P313: If skin irritation occurs: Get medical advice/attention.

P304+P312: IF INHALED: Call a POISON CENTER or doctor/physician if you feel unwell.

Storage:

P404: Store in a closed container.

Disposal:

P501: Dispose of contents/container according to all local, state and Federal regulations.

EMERGENCY OVERVIEW

PHYSICAL APPEARANCE: Light amber liquid

IMMEDIATE CONCERNS: Eye & Skin irritant

POTENTIAL HEALTH EFFECTS

EYES: Irritating, and may injure eye tissue if not removed promptly.

SKIN: Skin irritant with prolonged or repeated contact.

SKIN ABSORPTION: None Expected.

INGESTION: Although of moderate to low toxicity, ingestion can cause gastrointestinal irritation, nausea, vomiting, diarrhea, and possible death.

INHALATION: Mist is irritating to nose, throat and lungs.

REPRODUCTIVE TOXICITY

TERATOGENIC EFFECTS: None known.

CARCINOGENICITY: Not Established

MUTAGENICITY: None known.

MEDICAL CONDITIONS AGGRAVATED: Previous skin conditions such as dermatitis may be aggrevated.

ROUTES OF ENTRY: Breathing of mist or vapors. Ingestion.

CANCER STATEMENT: None

WARNING CAUTION LABELS: Irritant

PHYSICAL HAZARDS: None Expected.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	Wt.%	CAS
Ethylene glycol butyl ether	5 - 10	111-76-2
Nonylphenol Ethoxylate	0 - 5	9016-45-9
Fatty acids, tall-oil, sodium salts	0 - 5	61790-45-2
Sodium Dodecylbenzene Sulfonate	0 - 5	25155-30-0
Sodium Silicate	0 - 5	6834-92-0
Fragrance	< 0.5	N/A
Water	75 - 85	7732-18-5

4. FIRST AID MEASURES

EYES: Immediately flush eyes with water for at least 15 minutes, while holding eyelids open. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Seek medical attention immediately.

SKIN: Wash with soap and water. Get medical attention if irritation develops or persists.

INGESTION: Get immediate medical attention. Do not induce vomiting unless instructed to do so by poison center or physician.

INHALATION: Remove victim to fresh air and monitor. Seek medical advise if irritation persists.

SIGNS AND SYMPTOMS OF OVEREXPOSURE

EYES: Burning sensation with tearing, redness.

SKIN: Prolonged contact will cause irritation marked by redness, burning sensation.

SKIN ABSORPTION: Not Established

INGESTION: Irritation of mouth, throat, along with stomach upset, vomiting.

INHALATION: Irritation of nose, throat and lungs with coughing, sneezing, possible difficulty breathing.

ACUTE TOXICITY: Not Established

5. FIRE FIGHTING MEASURES

FLAMMABLE CLASS: NA = Not Applicable GENERAL HAZARD: NA = Not Applicable EXTINGUISHING MEDIA: Not required. Water based material. FIRE FIGHTING PROCEDURES: NA = Not Applicable

6. ACCIDENTAL RELEASE MEASURES

SMALL SPILL: Avoid walking in product. Wipe up or otherwise flush small spills to sanitary sewer.

LARGE SPILL: Avoid walking in material. Prevent product from entering into stream, soil, storm sewer or other bodies of water.

ENVIRONMENTAL PRECAUTIONS

WATER SPILL: Avoid discharges into open waterways.

LAND SPILL: Avoid discharge to soil.

GENERAL PROCEDURES: Isolate spill or leak area immediately. Keep unauthorized personnel away. Do not touch or walk through spilled material. Prevent entry into waterways, sewers, or confined areas. Absorb with dry earth, sand or other non-combustible material and transfer to containers.

SPECIAL PROTECTIVE EQUIPMENT: Eye protection, rubber gloves, rubber boots to protect feet.

7. HANDLING AND STORAGE

GENERAL PROCEDURES: Close container after use.

HANDLING: Wear eye protection, rubber gloves when handling concentrate.

STORAGE: Store in area inaccessible to children.

STORAGE TEMPERATURE: Store at ambient temperatures.

STORAGE PRESSURE: Store at ambient atmospheric pressure.

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/m³	ppm	mg/m³	ppm	mg/m³
Ethylope alveel butyl other	TWA	50	240	20	97	NL	NL
Ethylene glycol butyl ether						NL	NL

ENGINEERING CONTROLS: Provide mechanical ventilation when used in confined areas, or areas with poor ventilation.

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: Chemical splash googles and full face-shield.

SKIN: Rubber or other chemical resistant gloves. Rubber boots of used on floors.

PROTECTIVE CLOTHING: Chemical resistant outerwear (tyvek) if contact with spray or mist is anticipated.

WORK HYGIENIC PRACTICES: Wash with soap and water after handling. Do not eat, drink or smoke while using product.

9. PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL STATE: Liquid ODOR: Sassafras ODOR THRESHOLD: Not Established COLOR: Light amber **pH:** 12.0 to 13.0 PERCENT VOLATILE: 85+ FLASH POINT AND METHOD: None FLAMMABLE LIMITS: N/A AUTOIGNITION TEMPERATURE: NA = Not Applicable VAPOR PRESSURE: ≤ 20 mm Hg at (68°F) VAPOR DENSITY: ≤ 1 BOILING POINT: ~ 100°C (212°F) FREEZING POINT: ~ 0°C (32°F) THERMAL DECOMPOSITION: Not Available SOLUBILITY IN WATER: Complete EVAPORATION RATE: (Water = 1) 1.0 **DENSITY:** 8.35 at (68°F) SPECIFIC GRAVITY: 1.001 grams/ml. VISCOSITY: Water thin. (VOC): 8.150 % by weight

10. STABILITY AND REACTIVITY

REACTIVITY: Stable HAZARDOUS POLYMERIZATION: No CONDITIONS TO AVOID: Not Established POSSIBILITY OF HAZARDOUS REACTIONS: None Expected. HAZARDOUS DECOMPOSITION PRODUCTS: None known. INCOMPATIBLE MATERIALS: Strong acids, oxidizers.

11. TOXICOLOGICAL INFORMATION

ACUTE

Chemical Name	ORAL LD ₅₀ (rat)	DERMAL LD ₅₀ (rabbit)	INHALATION LC ₅₀ (rat)
Ethylene glycol butyl ether	1300 mg/kg (rat)	> 2000 mg/kg (rabbit)	> 3.1 mg/l
Nonylphenol Ethoxylate	16000 mg/kg (rat)	4490 mg/kg (rabbit)	
Sodium Dodecylbenzene Sulfonate	438 mg/kg (rat)		
Sodium Silicate	1500 to 3200 mg/kg (rat)		

EYES: Not Established

DERMAL LD₅₀: Not Established

SKIN ABSORPTION: None Expected.

ORAL LD₅₀: Not Established

INHALATION LC₅₀: Not Established

EYE EFFECTS: Moderate to severe eye irritant.

SKIN EFFECTS: Moderate skin irritant.

CARCINOGENICITY

Chemical Name	NTP Status	IARC Status	OSHA Status
Ethylene glycol butyl ether	No listed substance	Group 3 - Not classifiable as to its carcino genicity to Humans	No listed substance

IRRITATION: Irritant

SENSITIZATION: No known significant effects or critical hazards.

GENETIC EFFECTS: No known significant effects or critical hazards.

REPRODUCTIVE EFFECTS: No known significant effects or critical hazards.

TARGET ORGANS: May cause damage to blood, Kidney, liver with prolonged or repeated exposure to high concentrations of vapors.

MUTAGENICITY: No known significant effects or critical hazards.

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL DATA: Not Established

ECOTOXICOLOGICAL INFORMATION: Not Established

AQUATIC TOXICITY (ACUTE): Not Established

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Small amounts (less than 5 gallons) may be disposed of in sanitary sewer. Consult local authorities for additional disposal information.

FOR LARGE SPILLS: Consult with local and state authorities for large volume disposal.

PRODUCT DISPOSAL: Any method in accordance with local, state, and federal laws. Best method is to recycle or reuse for intended purpose.

EMPTY CONTAINER: Rinse container with clear water. Offer container for recycling, or dispose of in trash.

RCRA/EPA WASTE INFORMATION: NA = Not Applicable

14. TRANSPORT INFORMATION

DOT (DEPARTMENT OF TRANSPORTATION)

PROPER SHIPPING NAME: Cleaning Compound, not regulated.

ROAD AND RAIL (ADR/RID)

PROPER SHIPPING NAME: Cleaning Compound, not regulated.

AIR (ICAO/IATA)

SHIPPING NAME: Cleaning Compound, not regulated.

VESSEL (IMO/IMDG)

SHIPPING NAME: Cleaning Compound, not regulated.

15. REGULATORY INFORMATION

UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

311/312 HAZARD CATEGORIES: Health - Acute

FIRE: No PRESSURE GENERATING: No REACTIVITY: No ACUTE: Yes CHRONIC: No

313 REPORTABLE INGREDIENTS: 2-butoxyethanol 111-76-2 (Category: N230 Certain Glycol Ethers)

EPCRA SECTION 313 SUPPLIER NOTIFICATION

Chemical Name	Wt.%	CAS
Ethylene glycol butyl ether	5 - 10	111-76-2

302/304 EMERGENCY PLANNING

EMERGENCY PLAN: NA = Not Applicable

CERCLA (COMPREHENSIVE RESPONSE, COMPENSATION, AND LIABILITY ACT)

CERCLA REGULATORY: NA = Not Applicable

Chemical Name	Wt.%	CERCLA RQ
Sodium Dodecylbenzene Sulfonate	0 - 5	1000 lbs.

TSCA (TOXIC SUBSTANCE CONTROL ACT)

TSCA REGULATORY: All ingredients are listed on the TSCA Chemical Inventory.

STATES WITH SPECIAL REQUIREMENTS

Chemical Name	Requirements		
Ethylene glycol butyl ether	Massachusetts Right to Know Substance Pennsylvania Right to Know Substance New Jersey Right To Know Substance		
Nonylphenol Ethoxylate	Massachusetts Right to Know Substance New Jersey Right To Know Substance Pennsylvania Right to Know Substance		
Sodium Dodecylbenzene Sulfonate	New Jersey Right To Know Substance Pennsylvania Right to Know Substance New York Right to Know Substance		
Sodium Silicate	Pennsylvania Right to Know Substance New Jersey Right To Know Substance		

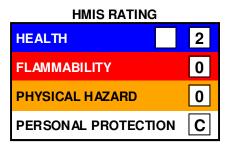
CALIFORNIA PROPOSITION 65: None

CARCINOGEN:

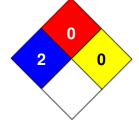
The International Agency for Research on Cancer (IARC) has concluded that there is inadequate evidence for carcinogenicity of 2butoxyethanol in humans, but limited evidence in experimental animals (Group 3 - not classifiable as to its carcinogenicity to humans).

16. OTHER INFORMATION

PREPARED BY: Regulatory Affairs Department Date Prepared: 05/05/2015







MANUFACTURER DISCLAIMER: This company cannot anticipate all conditions of handling and use of this product. Therefore, this company accepts no responsibility for results obtained by the application of this information, or the safety and suitability of the product either alone or in combination with other products. It is the responsibility of the employer and/or user to provide a safe workplace, using health and safety information contained herein as a guide. This company will accept no liability for damages or losses incurred from the improper handling and use of this product.