

## SECTION 1 – IDENTIFICATION

**NAME:** **BIO-DETERGENT**

**USE:** Liquid detergent for dishwasher

**MANUFACTURER:** **B.O.D. CHEMICALS INC.**  
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**EMERGENCY PHONE:** 1 (877) 565-8540

## SECTION 2 – HAZARDS IDENTIFICATION

### GHS CLASSIFICATION

**PHYSICAL HAZARDS:** Corrosive to metals, category 1

**HEALTH HAZARDS:** Acute toxicity, oral, category 4  
Skin corrosion / Irritation, category 1  
Serious eye damage / Eye irritation, category 1

**ENVIRONMENTAL HAZARDS:** Not available

### GHS LABEL ELEMENTS

**PICTOGRAM:**



**SIGNAL WORD:** DANGER

**HAZARD STATEMENTS:** May be corrosive to metals.  
Harmful if swallowed.  
Causes severe skin burns and eye damage.  
Causes serious eye damage.

### PRECAUTIONARY STATEMENTS

**PREVENTION:** Keep only in original container. Wash hands thoroughly after handling. Do not eat, drink or smoke when using this product. Do not breathing vapours. Wear protective gloves/protective clothing/eye protection/face protection.

**RESPONSE:** Absorb spillage to prevent material damage. **If swallowed:** Rinse mouth. Do NOT induce vomiting. Call a POISON CENTER or doctor/physician if you feel unwell. **If on skin (or hair):** Remove/Take off immediately all contaminated clothing. Rinse skin with water for at least 20 minutes/shower. Wash contaminated clothing before reuse. **If inhaled:** Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician. Specific treatment (see supplemental first aid on the label). **If in eyes:** Rinse cautiously with water for 15-20 minutes. Remove contact lenses, if present and easy to do. Continue rinsing, keeping eyelids open. Immediately call a POISON CENTER/doctor

**STORAGE / DISPOSAL:** Store in corrosive resistant container. Store locked up. Dispose of contents/container in accordance with local regulations (see 13<sup>th</sup> section).

## SECTION 3 – COMPOSITION / INFORMATION ON INGREDIENTS

INGREDIENT	CAS	% (W/W)
Sodium hydroxide	001310-73-2	10 - 30
Sodium citrate	006132-04-3	3 - 7

Sodium hypochlorite 007681-52-9 1 - 5

Sodium polyacrylate 009003-04-7 1 - 5

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## SECTION 4 – FIRST AID MEASURES

**SKIN:** Remove contaminated clothing. Rinse skin with water for at least 20 minutes/shower. Consult a physician if irritation persists.

**EYES:** Rinse cautiously with water for 15-20 minutes, keeping eyelids open. Remove contact lenses, if present and easy to do. Continue rinsing. Call a physician immediately.

**INGESTION:** Rinse mouth. Do not induce vomiting. Drink 3 to 4 glasses of water or milk. Do not give anything by mouth if victim is unconscious. Call a physician immediately.

**INHALATION:** Breathe fresh air. Give artificial respiration if necessary. Consult a physician if discomforts persist.

**MOST IMPORTANT SYMPTOMS AND EFFECTS, BOTH ACUTE AND DELAYED:** Skin: Burning and severe skin damage, redness of the skin. Eyes: Causes serious eye damage. Symptoms may include burning, tingling, watery eyes, redness, swelling and blurred vision. This could result in permanent eye damage.

**TO PHYSICIAN:** Treat symptoms.

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## SECTION 5 – FIRE-FIGHTING MEASURES

**EXTINGUISHING MEDIA:** Water spray, carbon dioxide, chemical powder, foam.

**UNSUITABLE EXTINGUISHING MEDIA:** Do not use water jet as an extinguisher, as this will spread the fire.

**SPECIFIC HAZARDS:** Not flammable. Under fire conditions, toxic and corrosive fumes are emitted. The product does not burn itself but may decompose upon heating to produce carbon monoxide and dioxide, corrosive and/or toxic fumes.

**SPECIAL FIRE FIGHTING PROCEDURES:** Wear protective clothing and self-contained breathing apparatus if necessary.

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## SECTION 6 – ACCIDENTAL RELEASE MEASURES

**PERSONAL PRECAUTIONS, PROTECTIVE EQUIPMENT AND EMERGENCY PROCEDURES:** Ventilate enclosed areas. Avoid contact of the product with eyes and skin. Do not breathe vapours. Wear gloves, safety goggles and respirator if needed. Prevent discharge in sewers. Keep away from incompatible materials.

**ENVIRONMENTAL PRECAUTIONS:** Avoid the spillage or runoff entering drains, sewers or watercourses.

**METHODS AND MATERIALS FOR CONTAINMENT AND CLEANING UP:** Wear protective clothing. Control spill to prevent runoff into sewers. Cover with inert absorbent material and recover in suitable containers. Sweep and rinse with water.

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## SECTION 7 – HANDLING AND STORAGE

**PRECAUTIONS FOR SAFE HANDLING:** Avoid contact of the product with eyes and skin. Do not breathe vapours. Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling.

**CONDITIONS FOR SAFE STORAGE, INCLUDING ANY INCOMPATIBILITIES:** Keep containers closed, in fresh, dry and well ventilated area, away from incompatible materials.

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## SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

### OCCUPATIONAL EXPOSURE LIMITS

INGREDIENT	CAS	VALUE	REGULATION
Sodium hydroxide	1310-73-2	VP: 2 mg/m <sup>3</sup>	RSST
Sodium hypochlorite	7681-52-9	2 mg/m <sup>3</sup>	WEEL

**APPROPRIATE ENGINEERING CONTROL:** Normal ventilation

**PERSONAL PROTECTIVE EQUIPMENT**



**SKIN:** Protective clothing. Impermeable gloves.  
**EYES:** Safety goggles.  
**RESPIRATORY:** If ventilation is inadequate, suitable respiratory protection must be worn.  
**HYGIENE MEASURES:** Wash hands after handling.

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**SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES**

**APPEARANCE / FORM:** Clear liquid  
**COLOR:** Colorless - yellowish  
**ODOR:** Chlorine  
**ODOR THRESHOLD:** Not available  
**pH:** 13 - 14  
**MELTING POINT / FREEZING POINT (°C):** < 0  
**BOILING POINT (°C):** > 100  
**FLASH POINT (°C):** Not available  
**EVAPORATION RATE:** Not available  
**EXPLOSIVE LIMITS:** Not available  
**VAPOUR PRESSURE:** Not available  
**VAPOUR DENSITY:** Not available  
**DENSITY (kg/L):** 1.26 - 1.28  
**WATER SOLUBILITY:** Complete  
**PARTITION COEFFICIENT N-OCTANOL / WATER:** Not available  
**AUTOIGNITION TEMPERATURE (°C):** Not available  
**DECOMPOSITION TEMPERATURE (°C):** Not available

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**SECTION 10 – STABILITY AND REACTIVITY**

**REACTIVITY:** No dangerous reaction known under conditions of normal use.  
**CHEMICAL STABILITY:** Stable at normal ambient temperatures and when used as recommended.  
**HAZARDOUS REACTIONS:** Hazardous polymerisation does not occur.  
**CONDITIONS TO AVOID:** Heat, sunlight, contact with incompatible materials.  
**INCOMPATIBILITY:** Acids, reducing agents, oxidizing agents, soft metals (Al, Zn, Sn).  
**HAZARDOUS DECOMPOSITION PRODUCTS:** Not available.

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**SECTION 11 – TOXICOLOGICAL INFORMATION**

**INFORMATION ON LIKELY ROUTES OF EXPOSURE**

<b>SKIN:</b>	Causes severe skin burns.
<b>EYES:</b>	Causes serious eye damage.
<b>INHALATION:</b>	May cause an irritation.
<b>INGESTION:</b>	Harmful if swallowed.

#### **INFORMATION ON TOXICOLOGICAL EFFECTS**

<b>ACUTE ORAL TOXICITY:</b>	Harmful if swallowed. LD50 (rat): 846 mg/kg
<b>ACUTE DERMAL TOXICITY:</b>	No health effects (normal conditions of use).
<b>ACUTE INHALATION TOXICITY:</b>	No health effects (normal conditions of use).

#### **DELAYED AND IMMEDIATE EFFECTS**

<b>SKIN CORROSION / IRRITATION:</b>	Causes severe skin burns.
<b>SERIOUS EYE DAMAGE / EYE IRRITATION:</b>	Causes serious eye damage.
<b>RESPIRATORY SENSITIZATION:</b>	Not expected to cause respiratory sensitization.
<b>SKIN SENSITIZATION:</b>	Not expected to cause skin sensitization.
<b>GERMINAL CELL MUTAGENICITY:</b>	No data available to indicate product or components present at greater than 0.1% are mutagenic or genotoxic.
<b>CARCINOGENICITY:</b>	No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen.
<b>REPRODUCTIVE TOXICITY:</b>	No potential reproductive toxicity.
<b>SPECIFIC TARGET ORGAN TOXICITY-SINGLE EXPOSURE:</b>	Not classified.
<b>SPECIFIC TARGET ORGAN TOXICITY-REPEATED EXPOSURE:</b>	Not classified.
<b>ASPIRATION HAZARD:</b>	Not classified.

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### **SECTION 12 – ECOLOGICAL INFORMATION**

<b>ECOTOXICITY:</b>	Sodium hydroxide LC50, Bluegill, 99 mg/l - 48h LC50, Mosquitofish, 125 mg/l - 96h  Sodium hypochlorite LC50, Daphnia magna, 1 mg/l LC50, Bluegill, 48h, 0.6 mg/l
<b>PERSISTENCE AND DEGRADABILITY:</b>	Not available
<b>BIOACCUMULATIVE POTENTIAL:</b>	Not available
<b>MOBILITY IN SOIL:</b>	Not available
<b>OTHER ADVERSE EFFECTS:</b>	Not available

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### **SECTION 13 – DISPOSAL CONSIDERATIONS**

<b>DISPOSAL INSTRUCTIONS:</b>	Collect in appropriate containers and recycle or dispose the product at a licensed waste disposal site or in accordance with local regulations. Avoid the spillage or runoff entering drains, sewers or watercourses.
<b>HAZARDOUS WASTE CODE:</b>	The waste code should be assigned in discussion between the user, the producer and the waste

disposal company.

**CONTAMINATED PACKAGING:** Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

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## SECTION 14 – TRANSPORT INFORMATION

**TDG:** UN1760, CORROSIVE LIQUID, N.O.S., (Sodium hydroxide), Class 8, PG II

**SPECIAL PRECAUTIONS FOR USER:** Read safety instructions, SDS and emergency procedures before handling.

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## SECTION 15 – REGULATORY INFORMATION

Ingredients included on inventory of DSL (Canada), REACH, TSCA (USA)

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## SECTION 16 – OTHER INFORMATION

**PRODUCT NAME:** BIO-DETERGENT

**IN CASE OF ACCIDENTAL SPILL:** CANUTEC (Canada): 1 (613) 996-6666

**PREPARED BY:** B.O.D. CHEMICALS INC.

**PHONE:** (450) 443-5556

**DATE:** November 21<sup>th</sup>, 2018

B.O.D. CHEMICALS INC. assume no responsibility for damages or physical injuries resulting in the use of this product. The user recognizes the risk in the use of this product and must consult and respect directions and dangers of this product.