

MATERIAL SAFETY DATA SHEET

1. PRODUCT & COMPANY IDENTIFICATION

Product Name: Biox-COMBO
Company: Pace International, LLC
Address: Office Manufacturing / Distribution
1201 3rd Avenue, Suite 5450 5661 Branch Road
Seattle, WA 98101 Wapato, WA 98951
Emergency Phone Number: 800.424.9300 (CHEMTREC)

2. COMPOSITION/INFORMATION ON INGREDIENTS

Hazardous Components

CAS #	Component	%	Exposure Limits
101-21-3	chlorpropham	56.5	Not established

Other Components

CAS #	Component	%	Exposure Limits
8000-34-8	clove oil	43.5	Not established

3. HAZARDS IDENTIFICATION

Causes moderate eye irritation. Avoid contact with eyes or clothing. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, or using tobacco. Prolonged or frequently repeated skin contact may cause allergic reactions in some individuals.

4. FIRST AID MEASURES

If in Eyes: Hold eye open and rinse slowly and gently with water for 15 – 20 minutes. Remove contact lenses, if present, after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

If on Skin: Take off contaminated clothing. Rinse skin immediately with plenty of water for 15 – 20 minutes. Call a poison control center or doctor for treatment advice.

If Inhaled: Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

If Swallowed: Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.

5. FIRE FIGHTING MEASURES

Extinguishing Media: Dry chemical, CO₂
Special Exposure Hazards: Keep away from strong oxidizers.
Special Protective Equipment for Firefighters: Wear self-contained breathing equipment.

6. ACCIDENTAL RELEASE MEASURES

Personal Precautions: See Section 8 for personal protection measures.
Environmental Precautions: Do not allow product to enter sewers, lakes, streams or other bodies of water.
Methods for Cleaning Up: Absorb liquid with sawdust or other absorbent material and incinerate or dispose of in an approved disposal area.



7. HANDLING & STORAGE

- Handling:** Good standards of hygiene should be maintained at all times. Smoking, eating, and drinking is prohibited in the work area. Avoid breathing fog. For personal protection, see section 8.
- Storage:** Keep away from strong bases and oxidizers. Avoid storing below 40°F (4°C). Keep container tightly closed when not in use.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

- Protective Clothing:** Long sleeved shirt and long pants, shoes and socks, chemical resistant gloves such as PVC, nitrile or butyl rubber.
- Respiratory Protection:** For entry into enclosed areas treated with fog, handlers must wear a respirator with an organic-vapor removing cartridge with a pre-filter approved for pesticides (MSHA/NIOSH approval number prefix TC-23C), or a canister approved for pesticides (MSHA/NIOSH approval number prefix TC-14G), or a NIOSH approved respirator with an organic vapor (OV) cartridge or canister with any N, R, P or HE pre-filter. If the enclosed area contains less than 19.5% oxygen, the respirator must be a supplied-air respirator (MSHA/NIOSH approval number prefix TC-21C) or a self-contained breathing apparatus (SCBA, MSHA/NIOSH approval number prefix TX-13F).
- Eye Protection:** Wear chemical goggles, safety glasses or face shield. Eye fountain and washing facilities should be present at work area.

9. PHYSICAL & CHEMICAL PROPERTIES

- Appearance:** light yellow
- Odor:** clove
- Boiling Point:** > 212°F (100°C)
- Flash Point:** 275 - 279°F (135 - 137°C)
- Flammable Limits:** Not available
- Explosive Properties:** Not explosive
- Oxidizing Properties:** reacts with zinc and potassium permanganate
- Vapor Pressure:** No data available
- pH (@ 25°C):** 6.60
- Specific Gravity:** 1.128 (H₂O=1)
- Solubility in Water:** Insoluble
- Viscosity:** 58.6 mm²/sec

10. STABILITY & REACTIVITY

- Conditions/Materials to Avoid:** Strong bases and oxidizers.
- Hazardous Decomposition Products:** Acrid smoke and fumes may form when heated to decomposition.

11. TOXICOLOGICAL INFORMATION

- Acute Oral:** LD₅₀ oral (rat): > 2000 mg/kg
- Acute Dermal:** LD₅₀ dermal (rat): > 2000 mg/kg
- Inhalation:** LC₅₀ (rat): > 4.67 mg/L
- Eye Irritation:** Slight irritant (EPA Category III)
- Skin Irritation:** Moderate irritant (EPA Category III)
- Sensitization:** Considered to be a contact sensitizer.

12. ECOLOGICAL INFORMATION

No data available on the product as formulated. Information is hereby provided for individual formula components previously identified as hazardous:



chlorpropham

Acute toxicity: Northern bobwhite quail, LD₅₀: > 5620 mg/kg
Bluegill sunfish, LC₅₀ (96h): 6.8 ppm
Rainbow trout, LC₅₀ (96h): 5.7 ppm
Daphnia magna, EC₅₀ (48h): 3.7 ppm

Chlorpropham is considered practically non-toxic to game birds and honey bees, and moderately toxic to fish and freshwater invertebrates.

13. DISPOSAL CONSIDERATIONS

Pesticide Disposal: Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility.

Container Disposal: Triple rinse container (or equivalent) promptly after emptying. Triple rinse as follows: Empty the remaining contents into application equipment or a mix tank. Fill the container ¼ full with water. Replace and tighten closures. Tip container on its side and roll it back and forth, ensuring at least one complete revolution, for 30 seconds. Stand the container on its end and tip it back and forth several times. Empty the rinsate into application equipment or a mix tank or store rinsate for later use or disposal. Repeat this procedure two more times. Offer for reconditioning if appropriate.

14. TRANSPORT INFORMATION

Not regulated for transport.

15. REGULATORY INFORMATION

CA Prop. 65: This product contains no chemicals known to the State of California to cause cancer, birth defects or other reproductive harm.

FIFRA: This product is registered with the U.S. EPA under registration number 64864-62.

SARA 313: Contains no chemicals subject to SARA Title III Section 313 in quantities sufficient to trigger reporting requirements.

TSCA: All components of this product are included or exempt from inclusion in EPA's Toxic Substances Control Act (TSCA) Chemical Substance Inventory.

WHMIS: This product has been classified in accordance with the hazard criteria of the CPR and the MSDS contains all of the information required by the CPR.

16. OTHER INFORMATION

HMIS Ratings: Health – 2 Flammability – 1 Reactivity – 0

The information herein is believed to be accurate and represents the best information currently available. However, Pace International LLC makes no warranty of merchantability or any other warranty, express or implied, with respect to such information, and assumes no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes.

MSDS Revision Date: 12/01/08

Supersedes: N/A

