

CO-MIX

Compatibility Agent For Liquid Fertilizer/Pesticide Mixture

Coastal AgroBusiness, Inc.

PO Box 856

3702 Evans Street

Greenville NC 27835

(252)756-1126

Emergency Phone Numbers:

Chemtrec(24 hrs): 1-800-424-9300

Coastal(Weekdays): 1-800-758-3456

IDENTITY

Trade Name: Co-Mix

EPA Reg. No.: Not Applicable

Synonyms:

Chemical Name: Alkylaryl

Polyoxyethylene glycol phosphate ester

Common Name:

Chemical Family: Organic Phosphate Ester (Free Acid)

Molecular Formula: Mixture

Molecular Weight: Not Determined

INGREDIENT

Component	CAS NO.	WT%	PEL/TLV
Alkylaryl Mixture		70.0	NOL/NOL
polyoxyethylene glycol phosphate ester			
Phosphoric Acid	07664-38-2	2.1	/1 mg/m ³
1-Butanol	00071-36-3	5.0	*100ppm*/50ppm

*8 hr TWA

Note: This product may contain trace 1,4-Dioxane as a by-product which can be absorbed by inhalation and through skin.

Please be advised that 1,4-Dioxane is a cancer-suspect agent and can cause liver and kidney injury with excessive overexposure.

PHYSICAL AND CHEMICAL CHARACTERISTICS

Appearance and Odor: Clear to hazy, colorless, slightly viscous liquid with a mild alcohol-like odor.

Boiling Point: 212°F (100°C)

Melting Point: Not Determined

Vapor Pressure: 4.3 mm Hg @ 20°C (n-butyl alcohol)

Vapor Density (Air=1): >1

% Volatility (V/V): 5.0%

Octanol/H₂O Partition Coef.: Not Determined

pH: ≈3 (1% aqueous solution)

Saturation in air (V/V): Not Determined

Specific Gravity (H₂O=1): 1.06

Solubility in Water: Miscible

Viscosity: Increases with lower temperatures.

FIRE AND EXPLOSION DATA

Flash Point: >150°F (65.5°C) (98°F(36.7°C) n-butyl alcohol)

Flammable Limits in Air (V/V):

LEL: 1.4% (n-butyl alcohol)

UEL: 11.2 % (n-butyl alcohol)

Auto-Ignition Temperature: Not Determined

Fire Extinguishing Media: Foam, dry chemical, CO₂ Class BC, ABC fire extinguisher.

Fire Control Tactics: Self-contained positive pressure breathing apparatus and protective clothing should be worn in fighting fires involving chemicals. Clear fire area of unprotected personnel. Cool fire exposed containers with water. Attack from upwind.

Unusual Fire and Explosion Hazards: Warning: Contains 1% n-butyl alcohol. Containers exposed to intense heat from fire should be cooled with water to prevent vapor pressure build-up which could result in container rupture. Build-up of vapor could present an explosion hazard. See flammable limits above.

NFPA HAZARD RATING

Health Hazard: 1-Slightly Hazardous

Fire Hazard: 2-Moderately Combustible

Reactivity: 0-Stable

Specific Hazard: None

REACTIVITY DATA

Stability: Stable under normal conditions.

Conditions to Avoid: Extreme temperatures; heat, sparks or open flame. Do not store or handle in aluminum equipment at temperatures over 120°F. Do not store or handle in mild steel containers.

Incompatibility (Materials to Avoid):

Strong oxidizing agents; Strong alkali or caustic.

Reactivity: Prolonged contact with mild steel will react to form highly explosive hydrogen gas.

Hazardous Decomposition Products: Phosphorus oxides, oxides of carbon and unidentified organic compounds may be formed during combustion.

Hazardous Polymerization: Will not occur.

HEALTH HAZARD INFORMATION

Threshold Limit Value: 50 ppm, 8 hr. TWA (n-butyl alcohol)

Permissible Exposure Limit: 100 ppm, 8 hr. TWA (n-butyl alcohol)

Warning Statements: WARNING Liquid contact with eyes or skin can cause irritation. Vapors can cause irritation of the eyes and skin. Avoid contact with eyes and skin. Harmful if swallowed. Do not breathe the vapors. Use only with adequate ventilation. Do not take internally. Keep out of reach of children.

Signs and Symptoms of Exposure: Irritation of the skin, eyes or nasal passages. Contact with eyes is painful and irritating and will cause chemical burns. Overexposure: Acute toxicity is slight and may cause nausea, dizziness, headache, and other signs of central nervous system depression. Also irritating to mucous membranes. Vapor is irritating to the

nose, throat, and respiratory tract. Acute inhalation is practically non-toxic and causes symptoms similar to ingestion. May cause severe skin injury (reddening/swelling). Slightly toxic through skin absorption. May cause severe eye injury. Damage is irreversible.

Medical Conditions Generally Aggravated by Exposure: Preexisting eye, skin and respiratory disorders may be aggravated by exposure to this product. Unnecessary exposure to this product or any chemical should be avoided.

Primary Route of Exposure: Inhalation, ingestion.

Acute Toxicity Data:

1. Oral Toxicity:

LD₅₀ 790 mg/kg (n-butyl alcohol)

2. Dermal Toxicity:

LD₅₀ 4.2 g/kg (n-butyl alcohol)

3. Inhalation Toxicity:

LC₅₀ 8000 ppm/4 hr (n-butyl alcohol)

4. Eye Irritation: Moderate

5. Skin Irritation/Sensitization: Slight

Chronic Toxicity Data: This product is not considered a carcinogen by OSHA, NTP, or IARC. However, this product may contain trace 1,4-Dioxane as a by-product which can be absorbed by inhalation and through skin. Please be advised that 1,4-Dioxane is a cancer-suspect agent and can cause liver and kidney injury with excessive overexposure.

Emergency and First Aid Procedures:

1. If swallowed: Induce vomiting of conscious person immediately by giving two glasses of water and pressing finger down throat. Never give anything by mouth to an unconscious person.

2. If inhaled: Remove person from contaminated area. If breathing has stopped, give artificial respiration, then oxygen if needed. Contact a physician.

3. If in Eyes: Immediately flush eyes with plenty of water for at least 15 minutes, holding eyelids apart to ensure flushing of the entire eye surface. Seek medical attention if irritation persists.

4. If on Skin: Remove contaminated clothing and wash with large amounts of soap and water. If irritation persists contact a physician.

NOTE TO PHYSICIAN: If victim is a child, give no more than one glass of water and one tablespoon syrup of IPECAC. If symptoms such as loss of gag reflex, convulsions or unconsciousness occur before emesis, gastric lavage should be considered following intubation with a cuffed endotracheal tube.

SPECIAL PROTECTION INFORMATION

Respiratory Protection: If vapors are present, use NIOSH or MSHA approved respirator for acidic vapors, air-line

respirator, or a self-contained breathing apparatus.

Eye Protection: Avoid contact with eyes. Wear full face shield or chemical safety goggles when handling.

Skin Protection: Avoid contact with skin. Use impervious gloves and clothing to prevent skin contact.

Ventilation: Local exhaust: Recommended when appropriate to control employee exposure.

Mechanical (general): Not recommended as the sole means of controlling employee exposure.

Other: For operation where spills or splashing may occur, use impervious body covering and boots. A safety shower and eye wash station should be available near work area. Wear protective clothing to prevent repeated or prolonged contact.

SPECIAL PRECAUTIONS AND SPILL/LEAK PROCEDURES

Handling and Storage: Keep liquid and vapor away from heat, sparks and flame. Avoid overheating or freezing. Vapors may accumulate and travel to ignition sources distant from the handling site. Keep container closed when not in use. Use with adequate ventilation. Spilled material is slippery. Avoid prolonged or repeated contact with skin. Wash thoroughly with soap and water after handling. Do not store or handle in aluminum equipment at temperatures over 120°F.

Steps To Be Taken In Case Material Is Released Or Spilled.

Small Spills: Soak up with absorbent, shovel into a suitable container for disposal. Spill areas may then be flushed with water.

Large Spills: Eliminate ignition sources. Foam may be used to suppress vapors. Dike the spill to minimize contaminated area and facilitate salvage or disposal. Recover material for use, reprocessing or disposal. Avoid runoff into storm sewers and ditches which lead to natural waterways. Under EPA-CERCLA ("Superfund") releases to air, land or water which exceed the reportable quantity must be reported to the National Response Center.

Waste Disposal Methods: (Incineration is preferred) in accordance with all applicable Federal, State and Local regulations. Material collected with absorbent may be disposed in a permitted landfill in accordance with Federal, State and Local regulations. Empty container may retain vapor or product residue. Observe all labeled safeguards until container is cleaned, reconditioned or destroyed. Note: Contains n-butyl alcohol at 5% and phosphoric acid at 2.1%. Sufficient quantities of disposal material

may be considered a hazardous waste. (RCRA 40 CFR 261.33-Hazardous Waste Number U031). Refer to latest EPA or State regulations regarding proper disposal.

SHIPPING DATA (PACKAGE AND BULK)

D.O.T. Proper Shipping Name: Not Regulated

D.O.T. Hazard Classification:

Primary: Not Applicable

Secondary: Not Applicable

D.O.T. Labels Required: None

D.O.T. Placards Required: None

Poison Constituent: Not Applicable

Hazardous Substance: n-butyl alcohol, phosphoric acid

Reportable Quantity (RQ):

Product: 11,265 gal. (N-butyl alcohol); 26,821 gal. (Phosphoric acid)

Ingredient: 5000 lbs. (N-butyl alcohol); 5000 lbs (phosphoric acid)

Bill of Lading Description: Adjuvant, Agricultural sprayable product liquid, NOS (Alkylaryl Surfactants), Contains n-butyl alcohol at 5% and 2.1% phosphoric acid.

Transportation Emergency #:

CHEMTREC: (800)424-9300

ADDITIONAL REGULATORY INFORMATION

Sara Title III Data:

Section 311 and 312 Hazard Categories:

Immediate Health Hazard: Y

Delayed Health Hazard: N

Fire Hazard: N

Reactive Hazard: N

Sudden Pressure Release Hazard: N

Section 302:

EHS: None; TPQ: 10,000 lbs.

Section 313: n-butyl alcohol is reportable under Section 313. (Contains n-butyl alcohol at 5%.) Phosphoric acid is reportable under Section 313. (Contains phosphoric acid at 2.1%)

CERCLA Reportable Quantity: 58,112 (product); 5000 lbs. (N-butyl alcohol)

Other: n-butyl alcohol is listed on the EPA/TSCA inventory of chemical substances.

National Response Center:

(800)424-8802

CHEMTREC: (800)424-9300

The information and statements herein are believed to be reliable and are given in good faith but are not to be construed as a warranty or representation for which we assume legal responsibility. Users should undertake sufficient verification and testing to determine the suitability for their own particular purpose of any information or products referred to herein. NO WARRANTY OF FITNESS FOR A PARTICULAR PURPOSE IS MADE.

MSDS NO.: 10460

DATE PREPARED: 02/15/86

DATE REVISED: 03/07/03

APPROVED: *JM Pearce*