

Production date: 30.10.2012
 Revision: 11.11.2015
 Trade name: Buffer Protect

I. PRODUCT INFORMATION

TRADE NAME: Buffer Protect
MANUFACTURER: bio-ferm GmbH, Technopark 1, 3430 Tulln, Austria
DISTRIBUTOR: Westbridge Agricultural Products, 1260 Avenida Chelsea, Vista, California 92081, USA
POISON CONTROL: 1(800)222-1222
USE: A buffering agent to be tank-mixed with Blossom Protect (EPA Reg. No. 86174-4).

II. HAZARDOUS INGREDIENTS

COMPOUND	%	CAS No.	EEINECS No.	OSHA PEL	ACGIH	NIOSH
Citric Acid	42.7%	77-92-9	201-069-1	N/A	N/A	N/A
Disodium phosphate	22.7%	7558-79-4	231-448-7	N/A	N/A	N/A



WARNING

KEEP OUT OF REACH OF CHILDREN

HAZARD STATEMENTS:

H319, H331, H302, H315

PRECAUTIONARY STATEMENTS:

P102, P103, P 264, P280, P305+P351+P338, P337+P313

HAZARDS TO HUMANS AND DOMESTIC ANIMALS

Causes substantial but temporary eye injury. Harmful if swallowed, inhaled or absorbed through the skin. Do not get in eyes or on clothing. Avoid contact with skin or breathing spray mist. Wash thoroughly with soap and water after handling and before eating, drinking, chewing gum, using tobacco or using the toilet. Remove and wash contaminated clothing before reuse.

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III. FIRST AID INFORMATION

HMIS RATINGS: Health Hazard: 2 Fire Hazard: 0 Physical Hazard: 0

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.

INGESTION: Call local 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 to an unconscious person.

SKIN: Remove contaminated clothing.
 Rinse skin with plenty of water for 15-20 minutes.
 Call a poison control center or doctor for treatment advice.

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

SUSPECTED CANCER AGENT?

 X NO: Federal OSHA, NTP, IARC, Cal/OSHA

III. PHYSICAL DATA

PHYSICAL STATE:	Solid
COLOUR:	White to yellowish
ODOUR:	Odorless
MELTING POINT/RANGE (°C):	Not available.
BOILING POINT/RANGE (°C):	Not applicable.
FLASH POINT (°C):	Not applicable.
IGNITION TEMPERATURE (°C):	Product is not flammable (EEC A.10).
DANGER OF EXPLOSION:	Product does not present an explosion hazard (EEC A. 14). However, formation of dust-air mixtures can lead to dust-explosion hazard under certain circumstances.
SOLUBILITY IN WATER:	Soluble

IV. FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (°C):	N/A
AUTOIGNITION TEMPERATURE:	N/A
EXTINGUISHING MEDIA:	CO ₂ , dry chemical powder, foam or water spray
UNSUITABLE EXTINGUISHING MEDIA:	Water with full jet.

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SPECIAL FIRE FIGHTING PROCEDURES: Not applicable.
UNUSUAL FIRE AND EXPLOSION HAZARD: Not applicable.
FIRE-FIGHTER PROTECTIVE CLOTHING: Use protective clothing suitable to the situation.

V. REACTIVITY DATA

STABILITY: Product stable at room temperature for at least two years.
HAZARDOUS REACTIONS: Under certain conditions, dust can be an explosion hazard.
INCOMPATIBILITY (materials to avoid): Strong bases, oxidizing agents, metals, acetates, metal nitrates, sulfides, and potassium tartrate.
DECOMPOSITION HAZARD: None known under normal storage conditions.
CONDITIONS TO AVOID: Keep away from heat and humidity.

VI. TOXICOLOGY

ACUTE TOXICITY:

Dust or highly concentrated solutions may cause eye irritation. May cause slight irritation to intact skin.

Oral toxicity	LD ₅₀	11700 mg/kg (rat) OECD 401
Dermal toxicity	LD ₅₀	>2000 mg/kg (rat)

IRRITANT EFFECT:

Skin: May cause skin irritation in sensitive individuals.
Eyes: Strong irritant.

SENSITIZATION EFFECT:

No known sensitizing effects.

TOXICITY FROM FREQUENT EXPOSURE:

Respiratory irritation has been observed after occupational use.

CORROSIVE EFFECT:

No information available.

CARCINOGENICITY, MUTAGENICITY, REPRODUCTIVE TOXICITY:

REPRODUCTIVE TOXICITY:

No information available.

MUTAGENICITY:

No information available.

CARCINOGENICITY:

No information available.

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VII. ECOTOXICITY INFORMATION

AQUATIC TOXICITY:

LC₅₀/96h > 440-760 mg/l Golden Orfe (*Leuciscus idus*)
LC₅₀/96h = 1516 mg/l Bluegill Sunfish (*Lepomis macrochirus*)
EC₅₀/48h > 200 mg/l Water flea (*Daphnia magna*)
EC₅₀/8d = 80 mg/l Algae (*Microcystis aeruginosa*)
EC₃₀/7d = 640 mg/l Algae (*Scenedesmus quadricauda*)
EC₅₀/16h > 10000 mg/l Bacteria (*Pseudomonas putida*)

BIOACCUMULATIVE POTENTIAL:

The product is water soluble and easily biodegradable in water and soil. Accumulation is not expected.

MOBILITY IN SOIL:

No information available.

RESULTS OF PBT AND VPVB ASSESSMENT:

Not applicable.

VIII. PERSONAL PROTECTIVE EQUIPMENT

VENTILATION REQUIREMENTS: Use in a well-ventilated area.

SPECIFIC PERSONAL PROTECTIVE EQUIPMENT (PPE):

EYE: Goggles or face shield
OTHER EQUIPMENT: Long-sleeved shirt and long pants. Shoes plus socks.

IX. ACCIDENTAL RELEASE

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:

Wear protective clothing, goggles and gloves. Ventilate area, minimize direct contact with skin and eyes, and prevent inhalation. Collect spilled material and place into a clean, covered container for disposal. Cover container loosely and prevent the formation of dust.

Always dispose of waste materials in accordance with all State, Federal and Local Regulations.

OBSERVE THE FOLLOWING PRECAUTIONS WHEN SPRAYING IN THE VICINITY OF AQUATIC AREAS SUCH AS LAKES, RESERVOIRS, RIVERS, PERMANENT STREAMS, MARSHES, NATURAL PONDS, ESTUARIES, AND COMMERCIAL FISH FARM PONDS:

SPRAY DRIFT REDUCTION MANAGEMENT:

The interaction of equipment and weather-related factors determines the potential for spray drift. The applicator is responsible for considering all factors when making application decisions. Avoiding spray drift is the responsibility of the applicator. Use the following as a guide for reducing drift onto non-target sites.

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BUFFER ZONE REQUIREMENTS:

GROUND/FOLIAR APPLICATIONS: Do not apply within 25 feet of lakes, reservoirs, rivers, permanent streams, marshes, natural ponds, estuaries, and commercial fish farm ponds.

WIND SPEED RESTRICTIONS: Drift potential increases at wind speeds of less than 3 mph (due to inversion potential) or more than 10 mph. Droplet size, canopy, and equipment specifications may also determine drift potential at any given wind speed.

Do not apply when winds are greater than 15 mph and avoid gusty and windless conditions. Avoid applications when wind direction is toward aquatic areas.

RUNOFF MANAGEMENT: Do not apply within 10 feet of aquatic areas. Consult your local Soil Conservation Service before using this product on erodible soils. Do not apply if soil is saturated with water. Do not apply under conditions that favor runoff from drift.

X. SPILL, LEAK AND DISPOSAL PROCEDURES**STORAGE AND DISPOSAL:**

Store in original container only. Do not contaminate water, food, or feed by storage or disposal. Do not reuse empty container. Completely empty container by shaking and tapping sides and bottom to loosen clinging particles. Empty residue from container. Then offer for recycling, if available, or dispose of in a sanitary landfill or by incineration or, if swallowed by state and local authorities, by burning. If burned, stay out of smoke. Recycling decontaminated containers is the best option of container disposal. The Agricultural Container Recycling Council (ACRC) operates the national recycling program. To contact your state and local ACRC recycler, visit the ACRC web page at www.acrecycle.org.

ENVIRONMENTAL PRECAUTIONS:

For disposal, follow all applicable Federal, State and local regulations.

For terrestrial uses: Do not apply directly to water, to areas where surface water is present, or to intertidal areas below the mean high water mark. Do not contaminate water when cleaning equipment or disposing of equipment wash waters or rinsate. Do not empty into sink or toilet. Do not empty into drains, surface water bodies or ground water.

XI. TRANSPORTATION

DOT: Non-regulated
IMDG/GGVSee: Not Classified
IMDG/GGV-Class: Not Classified
ICACO-TI & IATA-DGR: Not Classified
ADR/RID-GGVS/E: Not Classified

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code.

XII. REGULATORY INFORMATION**SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT):**

This product contains no substances which are denoted as toxic chemicals under the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (40 CFR Part 372).

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CERCLA: Not Regulated

TSCA: Not Regulated

PROPOSITION 65: This product does not contain any substance(s) which are deemed by the state of California to cause cancer, birth defects, or other reproductive effects.

This document complies with the U.S. Department of Labor's Occupational Safety and Health Administration's (OSHA) requirements.