

NFPA HAZARD RATING				U.S. TRANSPORT SUMMARY	
0	Least			Not regulated by the U.S. DOT as a hazardous material. See Section 14 for additional information.	
1	Slight	2	Health		
2	Moderate	0	Flammability		
3	High	0	Reactivity		
4	Severe				

SECTION 1: IDENTIFICATION	
Product Name: Actaphos® 0-0-25 EPA Registration #: Exempt Product ID/Unity #: 10007059, 10120949, 10136150, 10136474 Common Name: Potassium phosphite Chemical Description: Mono- and di-potassium salts of phosphorous acid Recommended Uses: Fertilizer product – See product label for full directions for use. Restrictions for Use: See product label for any potential restrictions on use.	
Manufactured For: WINFIELD SOLUTIONS, LLC P. O. Box 64589 St. Paul, MN 55164-0589	MEDICAL EMERGENCY TELEPHONE NUMBER: 1-877-424-7452 (24hrs) Non-Emergency Business Inquiries: 1-855-494-6343 Mon – Fri 8am – 5pm (Central Standard Time)
FOR EMERGENCY, SPILL, LEAK, FIRE, EXPOSURE, OR ACCIDENT, CALL: CHEMTREC 1-800-424-9300 (24 hours)	

SECTION 2: HAZARDS IDENTIFICATION	
EMERGENCY OVERVIEW: Clear, colorless liquid with slight odor. May cause mild but temporary eye and skin irritation.	
POTENTIAL HEALTH EFFECTS:	
Eyes: May cause mild but temporary eye irritation clearing within 24 hours. Skin: May cause mild but temporary skin irritation. Inhalation: May cause mild irritation of the upper respiratory tract. Ingestion: May cause irritation of the gastric system. Preexisting Conditions: Preexisting respiratory conditions may be aggravated by exposure to mists. Chronic Health Effects: None known	
Carcinogenicity	NTP: Not listed IARC: Not listed OSHA: Not listed
OSHA HCS 2012 CLASSIFICATION: Eye Irritation Category 2B	
SIGNAL WORD: WARNING	
HAZARD STATEMENTS:	
Causes eye irritation.	
Percent of product with unknown toxicity: 0%	
PRECAUTIONARY STATEMENTS:	
Prevention: Wash hands thoroughly after handling. Response: If in eyes: Rinse cautiously with water for 15 minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical attention. Storage: See Section 7 for storage information. Disposal: See Section 13 for disposal information.	

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS		
Ingredient	% (wt)	CAS Reg. #
Dipotassium phosphite	51.4 – 54.6%	13492-26-7
Monopotassium phosphite		13977-65-6
*Ingredients not specifically listed are non-hazardous and are considered to be confidential business information under 29 CFR 1910.1200(i).		
See Section 8 for exposure limits.		

SECTION 4: FIRST AID MEASURES	
Inhalation:	Remove person from contaminated area to fresh air and assist breathing as needed. Seek medical attention if irritation occurs.
Ingestion:	Seek medical attention or call a poison control center for treatment advice. Do not induce vomiting unless instructed to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.
Eyes:	Flush eyes with clean water for at least 15 minutes. Lift eyelids to facilitate irrigation. If present, remove contact lenses after 5 minutes and continue rinsing. Seek medical attention if irritation persists.
Skin:	Remove contaminated clothing and wash before re-using. Flush skin with water and then wash with soap and water. Seek medical attention if irritation persists.

SECTION 5: FIRE FIGHTING MEASURES
Suitable Extinguishing Media: Dry chemical, foam, carbon dioxide, water fog or water spray.
Special Fire Fighting Procedures: Wear NIOSH/MSHA approved self-contained breathing apparatus and full bunker gear. Dike area to prevent runoff and contamination of water sources. Dispose of fire control water later. Avoid breathing vapors; keep upwind.
Hazardous Combustion Products: When exposed to extremely high temperatures, the components of this product will decompose to produce irritating vapors and toxic gases (e.g., phosphorous oxides, phosphine, carbon monoxide, and carbon dioxide).
Unusual Fire and Explosion Hazards: Closed containers may explode from vapor expansion in high heat.

SECTION 6: ACCIDENTAL RELEASE MEASURES
Personal Precautions: Refer to Section 8 for personal protective equipment to be worn during containment and clean-up of a spill involving this product.
Environmental Precautions: Do not allow spilled product to enter sewers or waterways.
Methods for Containment: Contain spilled product by diking area with sand or earth.
Methods for Clean-up: Cover contained spill with an inert absorbent material such as sand, vermiculite or other appropriate material. Vacuum, scoop, or sweep up material and place in a container for disposal. Do not place spilled material back in original container.
Other Information: None known

SECTION 7: HANDLING AND STORAGE
Handling: Ensure adequate ventilation during handling and use. Immediately clean up spills that occur during handling. Keep containers closed when not in use. Practice good hygiene after using this material, especially before eating, drinking, smoking, using the toilet, or applying cosmetics.
Storage: Store in cool, dry areas away from children, food and feed products in an area away from incompatible substances. Protect packaging from physical damage. Protect from exposure to fire. Maintain product above minimum storage temperature. Do not store in aluminum or metal vessels.
Minimum Storage Temperature: 32°F
Other Precautions: Consult Federal, state and local laws and regulations pertaining to storage.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION			
Exposure Guidelines			
Component:	OSHA PEL	ACGIH TLV	NIOSH REL
No components have established limits			
Respiratory Protection: If conditions are poorly ventilated, use a NIOSH approved air-purifying respirator with cartridges/canisters approved for general particulates.			
Engineering Controls: Local Exhaust: Provide general or local exhaust ventilation systems to maintain airborne concentrations below OSHA PELs or other specified exposure limits. Local exhaust ventilation is preferred.			
Protective Gloves: Wear chemically protective gloves to prevent exposure to skin.			
Eye Protection: To avoid contact with eyes, wear chemical safety goggles or safety glasses and full face shield. Contact lenses are not protective eye devices. An emergency eyewash or water supply should be readily accessible to the work area.			
Other Protective Clothing or Equipment: Wear long-sleeve shirt, long pants and shoes plus socks to prevent skin contact.			
Work/Hygienic Practices: Never eat, drink, nor use tobacco in work areas. Practice good hygiene after using this material, especially before eating, drinking, smoking, using the toilet, or applying cosmetics.			

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES			
Physical State:	Liquid	Specific Gravity (H₂O=1):	1.46 (typical)
Vapor Pressure (mm Hg):	Not determined	Density (lbs/gallon):	12.18 lbs/gallon (typical)
Vapor Density (Air=1):	Not determined	Melting Point/Freezing Point:	Not determined
Solubility in Water (wt %):	Miscible	Boiling Point/Range:	Not determined
Viscosity:	Not determined	pH:	6.4 – 7.8
Appearance and odor:	Clear, colorless liquid with slight odor	Flash Point:	Not applicable

SECTION 10: STABILITY AND REACTIVITY	
Reactivity: None known	
Chemical Stability: Product is stable at ambient temperature and pressure, under normal storage and handling conditions.	
Possibility of Hazardous Reactions: Will not occur.	
Conditions to Avoid: Avoid excessive heat.	
Incompatible Materials: Strong bases, strong oxidizers, strong reducers and water-reactive materials.	
Hazardous Decomposition Products: When exposed to extremely high temperatures, the components of this product will decompose to produce irritating vapors and toxic gases (e.g., phosphorous oxides, phosphine, carbon monoxide, and carbon dioxide).	

SECTION 11: TOXICOLOGICAL INFORMATION	
ACUTE TOXICITY	
Eye Effects:	Causes mild but temporary eye irritation clearing in less than 24 hours.
Skin Effects:	LD50 >5,000 mg/kg; Not a skin irritant or skin sensitizer according to animal studies.
Acute Inhalation Effects:	LC50 >2.06 mg/L; no mortality was observed during the study and based upon component information, it is not anticipated that this product is toxic by inhalation.
Acute Oral Effects:	LD50 >5,000 mg/kg
Specific Target Organ Toxicity:	None known
CHRONIC TOXICITY	
Chronic Effects:	None known
Carcinogenicity:	None known
Mutagenicity:	None known
Teratogenicity:	None known
Reproductive Toxicity:	None known

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POTENTIAL HEALTH EFFECTS:

Eyes: May cause mild but temporary eye irritation clearing within 24 hours.

Skin: May cause mild but temporary skin irritation.

Inhalation: May cause mild irritation of the upper respiratory tract.

Ingestion: May cause irritation of the gastric system.

SECTION 12: ECOLOGICAL INFORMATION

ENVIRONMENTAL SUMMARY: Practically non-toxic to aquatic organisms and bees.

ECOTOXICITY DATA:

Fish Acute and Prolonged Toxicity: *Oncorhynchus mykiss* (Rainbow Trout): NOEC = 1,000 mg/L; LC50 > 1,000 mg/L (96-hour static test)

Aquatic Invertebrate Acute Toxicity: *Daphnia magna*: NOEC = 1,000 mg/L; EC50 > 1,000 mg/L (48-hour static test)

Aquatic Plant Toxicity: Not determined

Bird Acute and Prolonged Toxicity: *Anas platyrhynchos* (Mallard Ducks): acute oral LD50 > 2,000 mg/kg; NOEL > 2,000 mg/kg

Honeybee Toxicity: LD50 > 25 ug/bee

ENVIRONMENTAL EFFECTS:

Soil Absorption/Mobility: Not determined

Persistence and degradability: Not determined

Bioaccumulative Potential: Not determined

Other adverse effects: Not determined

SECTION 13: DISPOSAL CONSIDERATIONS

Waste: Dispose of in accordance with applicable Federal, state and local laws and regulations.

Container: Triple rinse and recycle the container or dispose of in accordance with Federal, state and local laws and regulations.

RCRA Characteristics: It is the responsibility of the individual disposing of this product to determine the RCRA classification and hazard status of the waste.

SECTION 14: TRANSPORT INFORMATION

DOT: This product is not regulated by the U.S. Department of Transportation as a hazardous material for ground shipment.

IMDG: This product is not regulated by the IMDG code as a hazardous material for shipment by sea.

IATA: This product is not regulated by the IATA as a hazardous material for air shipment.

TDG: This product is not regulated by the TDG as a hazardous material for ground shipment.

SECTION 15: REGULATORY INFORMATION

TSCA Inventory: All components are listed on the TSCA inventory.

SARA Title III Information:

Section 302 - Extremely hazardous substances: None listed

Section 311/312 - Hazard Categories: Immediate (Acute)

Section 313 - The following chemicals are subject to the reporting requirements of Section 313 of Title III, Superfund Amendments and Reauthorization Act of 1986 and 40 CFR 372:
None listed

CERCLA - This product contains the following chemicals which have a reportable quantity (RQ) under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA):

None listed

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California Proposition 65: This product does not contain any components known to the state of California to cause cancer and/or reproductive harm.

U.S. State Worker and Community Right-To-Know (RTK) Information (CT, IL, MA, MN, NH, NJ, PA, RI):

Chemical Name

CAS #

State(s)

No components listed

Canadian Domestic Substances List: All components are listed on the NDSL.

WHMIS Classification: This product is not approved for use in Canada. WHMIS classification is not determined.

SECTION 16: OTHER

Disclaimer: The information presented herein is based on available data from reliable sources and is correct to the best of WinField Solutions' knowledge. WinField Solutions, LLC makes no warranty, express nor implied, regarding the accuracy of the data or the results obtained from the use of this product. Nothing herein may be construed as recommending any practice or any product in violation of any law or regulations. The user is solely responsible for determining the suitability of any material or product for a specific purpose and for adopting any appropriate safety precautions. We disclaim all liability for injury or damage stemming from any improper use of the material or product described herein.

Revision Date: September 3, 2013

Supersedes document dated: June 2, 2010

Sections Revised: All