Safety Data Sheet

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Identification

Product Name: Dipotassium Phosphate 50% Aqueous Solution
Reference Number AST10006
Date: May 7, 2015

Use of the substance or preparation

Specialty fertilizers, automotive antifreeze formulations, nutrient for antibiotic production, pharmaceuticals, emulsifier in non-dairy creamers, humectant, etc. May be used to treat drinking water up to 18.4 mg/L (35.6 mg/L for 50% solution).

This material is certified to ANSI/NSF Standard 60 by NSF® International for use in potable water systems.

Distributor Address:

Silver Fern Chemical, Inc.
2226 Queen Anne Avenue North
Seattle, WA 98109, USA
Ph: 1-866-282-3384
email: info@silverfernchemical.com

Emergency telephone number:

Infotrac :800-535-5053
Outside USA & Canada :352-323-3500

2. HAZARDS IDENTIFICATION

GHS – This product does not meet the criteria for classification under GHS

3. COMPOSITION/INFORMATION ON INGREDIENTS

Composition

Substance	CAS No.	%w/w	EINECS No.	Risk Phrase
Dipotassium Phosphate (DKP)	7758-11-4	50%	231-834-1	None
Water	7732-18-5	50%	231-791-2	None

4. FIRST AID MEASURES

General

Likely Routes of Exposure: skin contact and inhalation.

Eye contact

Immediate first aid is not likely to be required. However, this material can be removed with water. Remove material from eyes, skin and clothing. Wash heavily contaminated clothing before reuse.

Skin contact

Immediate first aid is not likely to be required. However, this material can be removed with water. Remove material from eyes, skin and clothing. Wash heavily contaminated clothing before reuse.

Inhalation

Immediate first aid is not likely to be required. However, if symptoms occur, remove to fresh air.

Ingestion

Immediate first aid is not likely to be required. A physician or Poison Control Center can be contacted for advice.

5. FIRE FIGHTING MEASURES

Extinguishing media

Not applicable.

Unsuitable extinguishing media

Not applicable.

Exposure hazard

Not applicable.

Protective equipment

Not applicable.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions

Avoid unnecessary exposure and remove all material from eyes, skin and clothing.

Environmental precaution

Small quantities: See below.
Large quantities: See below.

Methods for cleaning up

Contain large spills with dikes and transfer the material to appropriate containers for reclamation or disposal. Absorb remaining material or small spills with a suitable absorbent and then place in a corrosion resistant chemical waste container. Do not allow spillage into sewers, streams or storm conduits.

Refer to Section 13 for disposal information and Sections 14 and 15 for reportable quantity information.

7. HANDLING AND STORAGE

Handling

Handle in accordance with good industrial hygiene and safety practices. These practices include avoiding unnecessary exposure and removal of material from eyes, skin and clothing.

Engineering measures

Provide natural or mechanical ventilation to minimize exposure. The use of local mechanical exhaust ventilation is preferred at sources of air contamination such as open process equipment. Consult National Fire Protection Association (NFPA) Standard 91 for design of exhaust systems.

Storage

Store in a cool, dry place to maintain product performance. Emptied container retains vapor and product residue. Observe all labeled safeguards until container is cleaned, reconditioned, or destroyed.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Occupational Exposure Limits

OSHA and ACGIH have not established specific exposure limits for this material.

Components referred to herein may be regulated by specific Canadian provincial legislation. Please refer to exposure limits legislated for the province in which the substance will be used.

Respiratory protection

Avoid breathing vapor or mist. Use NIOSH/MSHA approved respiratory protection equipment when airborne exposure limits are exceeded. Consult respirator manufacturer to determine appropriate type equipment for given application. Observe respirator use limitations specified by NIOSH / MSHA or the manufacturer. Refer to U.S. OSHA regulations 29 CFR 1910.134 or European Standard EN 149.

Hand/Skin protection

Although this product does not present a significant skin concern, minimize skin contamination by following good industrial practice. Wearing protective gloves is recommended. Wash hands and contaminated skin thoroughly after handling.

Eye protection

This product does not cause significant eye irritation or eye toxicity requiring special protection. Use good industrial practice to avoid eye contact.

9. PHYSICAL AND CHEMICAL PROPERTIES

a) Appearance: Clear Solution
b) Odor: None
c) Odor threshold: Undetermined.
d) pH: 10.3
e) Melting point/freezing point: -10 °C
f) Initial boiling point and boiling range: 108 °C
g) Flash point: Undetermined
h) Evaporation rate: Undetermined.
i) Flammability (solid, gas) : Undetermined.
j) Upper/lower flammability or explosive limits: Undetermined.
k) Vapor pressure: Undetermined.
l) Vapor density: Undetermined.
m) Relative density: Undetermined.
n) Solubility(ies) : Infinitely soluble
o) Partition coefficient: n-octanol/water: Undetermined.
p) Auto-ignition temperature: Undetermined.
q) Decomposition temperature: Undetermined.
r) Viscosity: 13 centipose @ 5 °C
s) Chemical Formula: K_2HPO_4
t) Specific Gravity:1.53 @ 20 °C

NOTE: These physical data are typical values based on material tested but may vary from sample to sample. Typical values should not be construed as a guaranteed analysis of any specific lot or as specifications for the product.

10. STABILITY AND REACTIVITY

Conditions to avoid

None known.

Materials to avoid

Severely corrosive to aluminum based on DOT 49 CFR criteria.

Hazardous decomposition

None known

11. TOXICOLOGICAL INFORMATION

This material has been defined as a hazardous chemical under the criteria of the OSHA Hazard Communication Standard (29 CFR 1910.1200).

Laboratory data

Data from ICL Performance Products LP single-dose (acute) animal studies with this material are given below:

Dipotassium Phosphate Anhydrous:

Oral - female rat LD_{50}: 4,750 mg/kg; slightly toxic
Oral - male rat LD_{50}: 8,100 mg/kg; practically nontoxic
Dermal - rabbit LD_{50}: > 5,000 mg/kg; practically nontoxic
Eye Irritation - rabbit (24-hr. exp.): minimally irritating
Skin Irritation - rabbit (24-hr. exp.): 1.9/8.0; slightly irritating
Skin Irritation - rabbit (4-hr. exp.): slightly irritating

Dogs given this material in their diet or by oral administration for a period up to 38 weeks showed kidney effects and/or damage and blood changes.

50% Dipotassium Phosphate Solution:

DOT - Aluminum corroded at 440 mils per year – Corrosive. Refer to Section 14 for Transportation information.

12. ECOLOGICAL INFORMATION

Environmental toxicity

The following data have been classified using the criteria adopted by the European Economic Community (EEC) for aquatic organism toxicity.

Algae: 10-day EC_{50} Chlorella vulgaris: 25 mg/L: Harmful

No definitive fish or invertebrate toxicity data was available for this material. Available data for similar materials suggests that this material would be practically nontoxic to fish and invertebrates (LC_{50} or EC_{50} > 100 mg/L).

Environmental Fate

ICL Performance Products LP has not conducted biodegradation studies with this product since when dissolved / hydrolyzed in water it yields completely mineralized materials.

13. DISPOSAL CONSIDERATIONS

European waste catalog number

Unknown

Disposal considerations

This material when discarded is not a hazardous waste as that term is defined by the Resource, Conservation and Recovery Act (RCRA), 40 CFR 261. Dry material may be landfilled or recycled in accordance with local, state and federal regulations. Consult your attorney or appropriate regulatory officials for information on such disposal.

14. TRANSPORT INFORMATION

The data provided in this section is for information only. Please apply the appropriate regulations to properly classify your shipment for transportation.

Road/Rail, Sea and Air

IMDG/UN: Undetermined
ICOA/IATA: Undetermined
RID/ADR: Undetermined
Canadian TDG: Corrosive liquid, basic, inorganic, n.o.s. (dipotassium phosphate solution),8, UN3266, III
US DOT: *Corrosive liquid, basic, inorganic, n.o.s. (dipotassium phosphate solution),8, UN3266, III

*This product is classified solely because of its corrosive effect to aluminum. In accordance with 49 CFR 154 (d)(1), when shipped by motor vehicle or rail cars in stainless steel bulk containers, this product will NOT be classified as a hazardous material. However, if shipped in non-bulk plastic containers that may be transported in aluminum motor vehicle or rail cars, this product will be classified as a hazardous material. ICL Performance Products LP packages this product in accordance with 49 CFR 173.203 (Non-bulk) and 173.241 (Bulk).

15. REGULATORY INFORMATION

EC label

Undetermined

Chemical Inventory

USA TSCA: Listed
Canada DSL: Listed
EC: Listed

WHMIS Classification: E- Corrosive Material

Additional information

SARA Hazard Notification
Hazard Categories Under Title III Rules (40 CFR 370): Immediate, Delayed
Section 302 Extremely Hazardous Substances: Not Applicable
Section 313 Toxic Chemical(s): Not Applicable

CERCLA Reportable Quantity: Not applicable

This product has been classified in accordance with the hazard criteria of the Canadian Controlled Products Regulation and the MSDS contains all the information required by the Canadian Controlled Products Regulation.

Refer to Section 11 for OSHA/HPA Hazardous Chemical(s) and Section 13 for RCRA classification.

16. OTHER INFORMATION

	Health	Fire	Reactivity	Additional Information
Suggested NFPA Rating	1	0	0	
Suggested HMIS Rating	1	0	0	H H = Splash goggles, gloves, synthetic apron, dust & vapor respirator

Reason for revision: Revised sections 2,3,9. Supersedes MSDS dated: July 24, 2012
Drafted in accordance with ECC Dir 2001/58/EC

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