



**ICL Performance  
Products LP**

# *Material Safety Data Sheet*

## 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

### Identification

Product Name: Dipotassium phosphate, anhydrous (DKP)  
Reference Number: AST10077  
Date: November 1, 2005

### Use of substance or preparation

Specialty fertilizer, automotive antifreeze formulations, nutrient for antibiotics, pharmaceuticals, food ingredient.

### Company/Undertaking Identification

ICL PERFORMANCE PRODUCTS LP  
622 Emerson Road - Suite 500  
St. Louis, Missouri 63141

Emergency telephone: In USA call CHEMTREC: 1 800 424 9300  
In Canada call CANUTEC: 1 613 996 6666

General Information: +1 800 244 6169 (Worldwide)

## 2. COMPOSITION/INFORMATION ON INGREDIENTS

### Composition

<u>Substance</u>	<u>CAS No.</u>	<u>% w/w</u>	<u>EINECS No</u>	<u>Risk Phrase</u>
Dipotassium Phosphate Anhydrous	7758-11-4	100	231-834-5	R36/37/38

## 3. HAZARDS IDENTIFICATION

### Classification of the substance/preparation

EC Classifications none  
Safety phrase S26 S36

### Human Health Effects

May cause skin and eye irritation and digestive and respiratory tract irritation.

### Environmental Effects

This material is not expected to produce any significant adverse environmental effects when recommended use instructions are followed.

### WARNING STATEMENTS

NO SIGNIFICANT HAZARDS ASSOCIATED WITH THIS MATERIAL

#### **4. FIRST AID MEASURES**

##### **General**

Treatment is systematic and supportive. This product may cause eye, skin, and respiratory tract irritation. No significant adverse effects are expected to develop if small amounts are swallowed. Ingestion of large amount may cause abdominal discomfort and diarrhea. Inhalation of this dust may cause coughing and sneezing.

##### **Eye Contact**

Immediately flush the eyes with plenty of water. Seek medical attention if needed. This dry powder may cause foreign body irritation in some individuals.

##### **Skin contact**

Remove this material from skin with plenty of soap and water. Prolonged contact with dry powder may cause drying or chapping of the skin.

##### **Inhalation**

Inhalation of the dust may cause coughing and sneezing. Remove to fresh air immediately. If not breathing, give artificial respiration. If breathing is difficult, give oxygen.

##### **Ingestion**

If victim is conscious and alert, give plenty of water to drink. Do NOT induce vomiting. Never give anything by mouth to an unconscious person. No significant health effects are expected if small amounts (less than a mouthful) are swallowed. Swallowing large amounts may cause abdominal discomfort and diarrhea.

#### **5. FIRE FIGHTING MEASURES**

##### **Extinguishing media**

Non-combustible

No special requirement

To extinguish fire use water spray, dry chemical, carbon dioxide, or appropriate foam

##### **Unsuitable extinguishable media**

Non-combustible

No special requirement.

##### **Exposure hazards**

No special considerations

##### **Protective equipment**

As a general precaution, firefighters and others exposed, wear self-contained breathing apparatus.

#### **6. ACCIDENTAL RELEASE MEASURES**

##### **Personal precautions**

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

### **Environmental precautions**

Small quantities: Avoid discharge into the environment

Large quantities: Avoid discharge into the environment

### **Method for cleaning up**

Sweep, scoop or vacuum spill material, contaminated soil and other contaminated material and place in clean, dry containers for removal. If possible, complete cleanup on a dry basis.

Residual material can be flushed with water.

## **7. HANDLING AND STORAGE**

### **Handling:**

Handle in accordance with good industrial hygiene and safety practices.

Avoid contact with eyes.

Wear protective gloves and wash hands immediately after handling.

Remove material from clothing.

### **Engineering measures**

Ensure adequate ventilation to keep dust concentrations below occupational exposure limit.

### **Storage**

Store in cool, dry place to maintain product performance. Product is hygroscopic and should be stored in a dry area.

## **8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

### **Occupational Exposure limit**

ACGIH TLV 10 mg/m<sup>3</sup> (inhalable) 8-hr TWA, 3 mg/m<sup>3</sup> (respirable) 8-hr TWA  
OSHA PEL 15 mg/m<sup>3</sup> (total dust) 8-hr TWA, 5 mg/m<sup>3</sup> (respirable) 8-hr TWA

OSHA and ACGIH have not established specific exposure limits for this material. However, OSHA and ACGIH have established limits for particulates not otherwise regulated (PNOR) and particulates not otherwise classified (PNOC) which are the least stringent exposure limits applicable to dusts.

### **Respiratory protection**

Avoid breathing dust. In case of insufficient ventilation, use approved respiratory protective equipment as described in U.S. OSHA 29 CFR 1910.134 or European Standard EN149.

### **Hand/Skin protection**

Wear protective gloves is recommended; wash hands and contaminated skin thoroughly after handling.

### **Eye protection**

Wear appropriate protective eyeglasses or chemical safety goggles as described in U.S. OSHA 29 CFR 1910.133 or European Standard EN166.

## **9. PHYSICAL AND CHEMICAL PROPERTIES**

### **General Information**

Chemical Formula: K<sub>2</sub>HPO<sub>4</sub>

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Form: Granules or powder  
Colour: White  
Odor: Odorless

**Important health, safety and environmental information**

pH: 9.0 (as a 1% solution)  
Solubility in Water: 170g/100 g. H<sub>2</sub>O (@ 25 °C)  
Bulk Density: 0.86 – 1.13 g/cc

**Other Information**

Melting point 253 °C  
Flash point not available  
Lower and upper explosion limits (UEL/LEL) not available

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**

Product is stable under normal conditions of storage and handling. Store in a cool, dry place to maintain product performance.

**Conditions to avoid**

Incompatibles – store in a dry area away from moisture.

**Materials to avoid**

Strong oxidizing agents and moisture.

**Hazardous decomposition**

Oxides of phosphorus.

**11. TOXICOLOGICAL INFORMATION****Laboratory data**

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

Oral - rat LD50: > 500 mg/kg; no more than slightly toxic  
Dermal - rabbit LD50: > 300 mg/kg; no more than slightly toxic  
Eye Irritation - rabbit: mildly irritating (unwashed eyes)  
Eye Irritation – rabbit: nonirritating (washed eyes)  
Skin irritation – rabbit: mildly irritating 300 mg/kg  
Skin Irritation - rabbit: nonirritating 20 mg/kg

**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

48-hr EC50 Daphnia magna: > 100 mg/l, Practically Nontoxic  
96-hr LC50 Mysid Shrimp > 100 mg/l, Practically Nontoxic  
96-hr LC50 Rainbow trout: > 100 mg/l, Practically Nontoxic

**Environmental fate**

Inorganic compounds in contact with the soil, sub-surface or surface waters may be taken up by plants and utilized as essential nutrients. Phosphates may also form precipitates, usually with calcium or magnesium. The resultant compounds are insoluble in water and become a part of the soil or sediment. The term biodegradability, as such, is not applicable to inorganic compounds.

**13. DISPOSAL CONSIDERATIONS****European waste catalog number**

Not available

**Disposal considerations**

This material when discarded is not a hazardous waste as that term is defined by the U.S. Resource, Conservation and Recovery Act (RCRA), 40 CFR 261. Dry material may be land filled 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	Not classified
ICAO/IATA	Not classified
RID/ADR	Not classified
Canadian TDG	Not classified
U.S. DOT	Not classified

**15. REGULATORY INFORMATION****EC Label**

Hazard symbol:	none
Risk phrase	R36/37/38 – irritating to eyes, respiratory system and skin.
Safety phrase	S26 – In case of contact with eyes, immediately flush with plenty of water and seek medical attention S36/37 – Wear suitable protective clothing and gloves

**Chemical Inventory**

USA TSCA:	Listed
Canada DSL:	Listed
EC:	Listed
Japan	Listed
Australia	Listed
Korea	Listed
Philippines	Listed
China	Listed

**Additional information**

WHMIS Classification Not Controlled

SARA Hazard Notification

Hazard Categories Under Title III Rules (40 CFR 370):	None
Section 302 Extremely Hazardous Substances:	None

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Section 313 Toxic Chemical(s): None

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 Hazardous Chemical(s) and Section 13 for RCRA classification.

**16. OTHER INFORMATION**

	<u>Health</u>	<u>Fire</u>	<u>Reactivity</u>	<u>Additional Information</u>
Suggested NFPA Rating	1	0	0	
Suggested HMIS Rating	1	0	0	F = safety glasses, gloves, synthetic apron, and dust respirator

Reason for revision: New Company  
Drafted in accordance with ECC Dir 2001/58/EC

Supersedes MSDS dated: 24 April 2003

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