ICL Performance Products LP

Material Safety Data Sheet

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Product Name: PHOS-CHEK® FIRE RETARDANT GRADES D-75F AND D-75R
Reference Number: AST10035
Date: December 5, 2006

Company Information:

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: +1 800 424 6169 (Worldwide)

2. COMPOSITION/INFORMATION ON INGREDIENTS

Component	CAS No.	% by weight
Diammonium Sulfate	7783-20-2	> 65
Monoammonium Phosphate	7722-76-1	> 15
Diammonium Phosphate	7783-28-0	> 5
Guar Gum, Hydroxypropyl	39421-75-5	<10
Performance Additives +	Trade Secret	<5

+ Components are Company Trade Secret - Business Confidential. ICL Performance Products LP is withholding the specific chemical identity under provision of the OSHA Hazard Communication Rule Trade Secrets (1910.1200(i)(1)). The specific chemical identity will be made available to health professionals in accordance with 29 CFR 1910.1200 (i)(1) (2) (3) (4)..

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

Appearance and Odor: Reddish colored mixture of powdered and granular components with little or no odor.

WARNING STATEMENTS

WARNING!
CONTAINS GUAR GUM WHICH CAN CAUSE ALLERGIC RESPIRATORY REACTION
MAY CAUSE RESPIRATORY TRACT IRRITATION

POTENTIAL HEALTH EFFECTS

Likely Routes of Exposure: Skin contact and dust inhalation

EYE CONTACT: No more than slightly irritating based on toxicity studies. The dry powder may cause foreign body irritation in some individuals.

SKIN CONTACT: No more than slightly toxic based on toxicity studies. Non irritating based on toxicity studies. The dry powder may cause drying or chapping of the skin.

INHALATION: May cause nasal and respiratory tract irritation based on toxicity information of components. May cause an allergic respiratory tract reaction based on toxicity information of quar gum.

INGESTION: Not toxic if swallowed based on toxicity studies. No significant adverse health effects are expected to develop if only small amounts (less than a mouthful) are swallowed.

Refer to Section 11 for toxicological information.

4. FIRST AID MEASURES

IF IN EYES OR ON SKIN, 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.

IF INHALED, remove to fresh air. If breathing, immediate first aid is not likely to be required. If breathing is difficult, give oxygen. If not breathing give artificial respiration. Get medical attention.

IF SWALLOWED, immediate first aid is not likely to be required. A physician or Poison Control Center can be contacted for advice.

5. FIRE FIGHTING MEASURES

FLASH POINT: Not combustible

HAZARDOUS PRODUCTS OF COMBUSTION: Not applicable

EXTINGUISHING MEDIA: Not applicable

UNUSUAL FIRE AND EXPLOSION HAZARDS: None known

FIRE FIGHTING EQUIPMENT: Not applicable

6. ACCIDENTAL RELEASE MEASURES

In case of spill, sweep, scoop or vacuum and remove. Flush residual spill area with water.

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

7. HANDLING AND STORAGE

HANDLING

Avoid breathing dust.
Keep container closed.
Use with adequate ventilation.

Emptied container retains dust and product residue. Observe all labeled safeguards until container is cleaned, reconditioned, or destroyed. The reuse of this material's container for nonindustrial purposes is prohibited and any reuse must be in consideration of the data provided in the MSDS.

STORAGE: Product is stable under normal conditions of storage and handling.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

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

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.

RESPIRATORY PROTECTION: Avoid breathing dust. Use NIOSH/MSHA approved respiratory protection equipment when airborne exposure is excessive. Consult respirator manufacturer to determine appropriate type equipment for given application. Observe respirator use limitations specified by NIOSH/MSHA or the manufacturer. Respiratory protection programs must comply with 29 CFR 1910.134.

Attention! Repeated or prolonged inhalation may cause allergic respiratory reaction in some people.

VENTILATION: Provide natural or mechanical ventilation to minimize exposure. If practical, use local mechanical exhaust ventilation at sources of air contamination such as open process equipment.

AIRBORNE EXPOSURE LIMITS:

Product/Component	OSHA PEL	ACGIH TLV
Phos-Chek Fire Retardant Grades D-75F AND D-75R	None Established	None Established

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

OSHA PEL	ACGIH TLV
15 mg/m3 (total dust) 8-hr TWA	10 mg/m3 (inhalable) 8-hr TWA
5 mg/m3 (respirable) 8-hr TWA	3 mg/m3 (respirable) 8-hr TWA

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.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Reddish powder
Odor:	Essentially odorless
Viscosity:	1000-2000 centipoise @ 21 °C (70 °F) when dissolved in water at the recommended level of 1.20 pounds per gallon of water.
PH:	5.5-6.5

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

STABILITY: Product is stable under normal conditions of storage and handling.

MATERIALS TO AVOID: None known

HAZARDOUS DECOMPOSITION PRODUCTS: Ammonia and phosphoric acid may be formed when these products are heated above 90 °C (194 °F). Further decomposition resulting in sulfur dioxide may occur at approximately 250 °C (482 °F).

HAZARDOUS POLYMERIZATION: Does not occur.

11. TOXICOLOGICAL INFORMATION

Data from laboratory studies conducted by ICL Performance Products LP with PHOS-CHEK Fire Retardant, Grades D-75F and D-75R are summarized below.

	Oral LD50 (Rat)	Dermal LD50 (Rabbit)	Eye Irritation (Rabbit)	Skin Irritation (4-hr, Rabbit)
PHOS-CHEK D-75F	Slightly Toxic Q(>505 mg/kg)	No More Than Slightly Toxic (>2,020 mg/kg)	Slightly Irritating	Nonirritating
PHOS-CHEK D-75F 1.2 lbs/gal Solution	Practically Nontoxic (>5050 mg/kg)	No More Than Slightly Toxic (>2,020 mg/kg)	Practically Nonirritating	Nonirritating
PHOS-CHEK D-75R	Slightly Toxic (>4249 mg/kg)	No More Than Slightly Toxic (>2,020 mg/kg)	Practically Nonirritating	Nonirritating
PHOS-CHEK D-75R 1.2 lbs/gal Solution	Practically Nontoxic (>5,050 mg/kg)	No More Than Slightly Toxic (>2,020 mg/kg)	Practically Nonirritating	Nonirritating

COMPONENTS

Data from ICL Performance Products LP studies and/or the available scientific literature on the components of this material which have been identified as hazardous chemicals under the criteria of the OSHA Hazard Communication Standard (29 CFR 1910.1200) are discussed below:

Diammonium Sulfate
Diammonium sulfate was slightly toxic orally and no more than slightly toxic after skin application (rabbits). It was slightly irritating to rabbit eyes and nonirritating to rabbit skin. Inhalation of diammonium sulfate by guinea pigs was reported to produce lung effects and, at high level exposures, animal deaths due to shock and airway constriction. Repeated inhalation had no effect on lung defense mechanisms of hamsters, but was reported to increase the incidence of emphysema in comparison to controls. Aerosols of diammonium sulfate aggravated artificially induced emphysema in rats. Diammonium sulfate produced no genetic changes in standard tests using bacterial cells.

Guar Gum, hydroxypropyl
PHOS-CHEK Fire Retardant, Grades D-75F and D-75R contain hydroxypropylguar, which was reported to be irritating to eyes and respiratory tract. Respiratory allergenic responses were reported following repeated exposures in a study of a small group of exposed workers.

12. ECOLOGICAL INFORMATION

ICL Performance Products LP has not conducted environmental toxicity or biodegradation studies with this product.

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

24-hr LC50 Daphnia Magna:	> 1,000 mg/l	Practically Nontoxic
48-hr LC50 Rainbow Trout:	> 1,000 mg/l	Practically Nontoxic
48-hr LC50 Fathead Minnow:	> 1,000 mg/l	Practically Nontoxic

13. 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.

US DOT

Not hazardous for transport

Canadian TDG

Not hazardous for transport

15. REGULATORY INFORMATION

TSCA Inventory: All Components Listed
DSL Inventory: Listed
WHMIS Classification: D2(B) - Materials Causing Other Toxic Effects

SARA Hazard Notification
Hazard Categories Under Title III Rules (40 CFR 370): Not Applicable
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	E

Reason for revision: Revised section 15. Supersedes MSDS dated: April 20, 2006
Product Use: Fire Retardant

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