

IMC

AGRICO®

Feed Ingredients

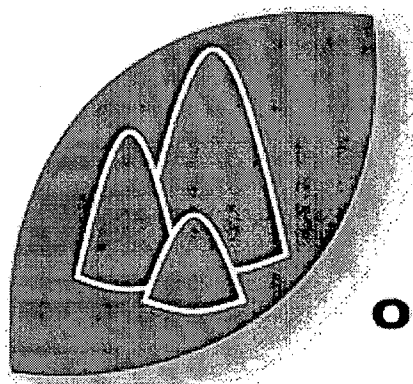
Welcome to the IMC-Agrico Feed Ingredients web site. Here you'll learn more about one of the world's largest suppliers of feed-grade phosphate and potassium. For more than 50 years, the company has sold nutritional feed supplements for cattle, sheep, swine, poultry and horses.

We've just made our site easier for you to navigate, with faster links and a simplified contact/library section.

Let us know what you think.

IMC Agrico Feed Ingredients
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OUR PRODUCTS

Product Description & Benefits

BIOFOS[®] is a feed-grade monocalcium phosphate.

DYNAFOS[®] is a feed-grade dicalcium phosphate.

MULTIFOS[®] is a feed-grade tricalcium phosphate.

MONOFOS[®] is a feed-grade monoammonium phosphate

LIQUIFOS[®] is a feed-grade wet-process phosphoric acid in water.

DYNA-K[®] is a feed-grade potassium chloride.

DYNA-K[®] WHITE is a feed-grade potassium chloride.

DYNAMATE[®] is a feed-grade potassium and magnesium sulfate.

K-S[®] is a feed-grade potassium sulfate.

FEED UREA 46% is a feed grade urea for ruminants.

Specifications

PDS

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Material Safety Data

MSDS

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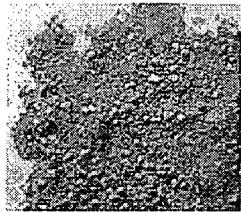
MSDS

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PRODUCTS

IMC AGRICO

Feed Ingredients



MULTIFOS®

Tricalcium Phosphate for
animal and poultry feed

PDS

MSDS

Product Description:

MULTIFOS is a feed grade tricalcium phosphate. It is derived from Florida phosphate rock, in a carefully controlled thermochemical process that enhances biological availability, drives off fluorine and prepares the product for feed mixing.

Benefits:

- MULTIFOS has a high biological value.
- MULTIFOS is ideal for use in high nutrient density feeds.
- MULTIFOS means uniform analyses and product dependability.
- MULTIFOS is granular and non-hygroscopic - excellent physical qualities for ease of handling in bulk shipments and in feed mixing equipment.
- MULTIFOS provides flexibility in feed formulation. It has approximately a 1.7 to 1.9 calcium:phosphorus ratio.
- MULTIFOS feeding quality is backed up by years of IMC-Agrico and university research on tricalcium phosphates.
- MULTIFOS is continually checked by the IMC-Agrico chick test for its biological value.
- MULTIFOS is guaranteed by a continuous quality control program.
- MULTIFOS customers are kept fully informed on latest developments in phosphate nutrition.
- MULTIFOS is available by rail or truck, in bulk or in 50 lb. (22.7 kg) multi-wall, moisture-proof bags.



Specifications:

<u>Guaranteed Analysis:</u>	<u>%</u>	<u>Physical Properties:</u>
Phosphorus (P), min	18	Bulk density:
Calcium (Ca), max	34	lb/cu foot — 82-85
Calcium (Ca), min	30	Moisture: Approximately 0.6%
Fluorine (F), max	0.18	Color: Brownish-gray
		pH: 6.0

<u>Typical Sieve Analysis: (Tyler)</u>	<u>%</u>
Through 12 mesh, not less than	95
Through 200 mesh, not more than	5

<u>Typical Chemical Analysis*:</u>	<u>%</u>		<u>PPM</u>
Phosphorus	18.20	Manganese	250
Calcium	30.50	Zinc	135
Fluorine	0.15	Molybdenum	5
Iron	0.76	Copper	15
Magnesium	0.27	Cobalt	4
Sodium	4.80	Selenium	<1
Potassium	0.05		

**Analysis of trace elements are approximate only and subject to variation.*

Feed Label Information:

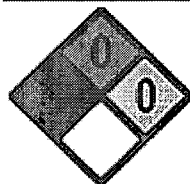
For the purpose of registering products containing MULTIFOS, the term "phosphoric acid" has been accepted in all states as being adequately descriptive.



Material Safety Data Sheet:

EMERGENCY NUMBERS: Transportation (CHEMTREC): 800-424-9300 • Health: 800-282-9024

Identification	Fire & Explosion	Spill • Leak • Disposal
Composition	Reactivity Data	Special Protection
Physical Data	Health Hazards	Special Precaution



NFPA CODE
Blue = Health • **Red** = Fire
Yellow = Reactivity • **White** = Other

HAZARD RATING SCALE
0 = Least • **1** = Slight • **2** = Moderate
3 = High • **4** = Extreme

Identification

PRODUCT NAME — MULTIFOS®

CAS NO. — 7758-87-4

CHEMICAL FAMILY — Inorganic Salt

MOLECULAR WEIGHT — Not Applicable

CHEMICAL NAME — Not Applicable

FORMULA — $\text{Ca}_3(\text{PO}_4)_2$

DOT CLASS — Not Regulated by DOT

Composition

COMPOSITION	%	CAS NO.
<i>Ingredients</i>		
Tricalcium Phosphate $\text{Ca}_3(\text{PO}_4)_2$	92-93	7758-87-4
Iron, aluminum, magnesium phosphates	7-8	

MULTIFOS is not classified as a hazardous material by the criteria of the OSHA Hazard Communication Standard, 29 CFR Part 1910, .1910.1200, "Hazard Communication"

Physical Data

MELTING POINT — Not Applicable

BULK DENSITY — 85-88

VAPOR PRESSURE — Not Applicable

SPECIFIC GRAVITY ($\text{H}_2\text{O}=1$) — 2.6

PERCENT VOLATILE — Not Applicable

SOLUBILITY IN WATER (77° F) — Negligible

APPEARANCE AND ODOR — Brownish gray and odorless granules

Fire & Explosion

FLASH POINT — Not Applicable

FLAMMABLE LIMITS — Not Applicable

EXTINGUISHING MEDIA — MULTIFOS is a non-flammable inorganic salt. Use extinguishing media appropriate for surrounding fire.

Reactivity Data

STABILITY — MULTIFOS is stable under all normal conditions.

INCOMPATIBILITY — (Materials to avoid) — None.

HAZARDOUS POLYMERIZATION — Will not occur.

Health Hazard

OSHA PERMISSIBLE EXPOSURE LIMIT OR ACGIH TLV — None established. We suggest the OSHA nuisance dust limit of 15 milligrams per cubic meter as total dust.

ROUTES OF ENTRY — Lungs (breathing), ingestion (swallowing)

EFFECTS OF OVEREXPOSURE — *Short Term:* May cause mechanical abrasion if deposited in the eyes. Inhalation of dust may cause discomfort, coughing, shortness of breath. *Long Term:* As with any inorganic dust, long-term inhalation of dust concentrations higher than recommended Permissible Exposure Limits may cause delayed lung injury.

TOXICITY DATA — None found.

FIRST AID — *Eyes:* Flush thoroughly with water. See a physician if irritation persists. *Skin:* Wash with water.

Spill, Leak & Disposal

STEPS TO BE TAKEN IN CASE MATERIAL IS RELEASED OR SPILLED — If uncontaminated, sweep up or collect, and reuse as product. If contaminated with other materials, collect in suitable containers.

WASTE DISPOSAL METHOD — Uncontaminated material can generally be disposed of in an approved land disposal facility, in accordance with applicable federal, state and local regulations. Depending upon type and extent of contamination, if any, other disposal methods may be required by environmental regulatory agencies.

Special Protection

RESPIRATORY PROTECTION — If dust concentrations exceed recommended Permissible Exposure Limits,