

Material Safety Data Sheet

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BASF CORPORATION
3000 CONTINENTAL DRIVE

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BOTH NUMBERS ARE AVAILABLE DAYS, NIGHTS, WEEKENDS, & HOLIDAYS.

SECTION 1 - PRODUCT INFORMATION

NATUPHOS® 1200 enzyme powder

Product ID: NCN 597119

Common Chemical Name:

Phosphatase, phytate 3-

Synonyms:

Phytase; 30132990

Molecular Formula:

MIXTURE

Chemical Family: Enzyme

Molecular Wt.: NOT APPLICABLE

SECTION 2 - INGREDIENTS

Chemical Name:	CAS	Amount
WATER	7732-18-5	> 0.1 %
PEL/TLV NOT ESTABLISHED		
PHYTASE	37288-11-2	< 2.5 %
PEL/TLV NOT ESTABLISHED		
RICE HULLS	*NVN460159	< 97.5 %
PEL/TLV NOT ESTABLISHED		

SECTION 3 - PHYSICAL PROPERTIES

Color: Brown
Form/Appearance: Powder
Odor: Faint
Specific Gravity: NOT AVAILABLE
Bulk Density: 0.35 G/CC
pH: Typical 5.5- 6 Low/High 50 GM/L H2O U.O.M. @ Pressure
Boiling Pt: NOT AVAILABLE
Freezing Pt: NOT AVAILABLE
Decomp. Temp: NOT AVAILABLE
Solubility in Water Description: Insoluble

SECTION 4 - FIRE AND EXPLOSION DATA

	Typical	Low/High	Deg.	Method
Flash Point:	NOT AVAILABLE			
Autoignition:	NOT AVAILABLE			
Extinguishing Media:	Use water, dry extinguishing media, carbon dioxide (CO2) or foam.			
Fire Fighting Procedures:	Firefighters should be equipped with self-contained breathing apparatus and turn out gear.			
Unusual Hazards:	Ensure adequate ventilation to minimize dusting.			

SECTION 5 - HEALTH EFFECTS

Routes of entry for solids and liquids include eye and skin contact, ingestion and inhalation. Routes of entry for gases include inhalation and eye contact. Skin contact may be a route of entry for liquified gases.

Toxicology Test Data:

Rat, Oral LD50 - > 2000 MG/KG
Moderately Toxic
Rat, Inhalation Safety Screen, 4 hr - > 5.0 MG/L
Moderately Toxic
Rabbit, Primary Skin Irritation -
Nonirritating
Rabbit, Mucous Membrane Irritation Study -
Nonirritating
Ames Test (with reductive metabolism) -
Not mutagenic
Mouse Micronucleus Test: Blood -
No clastogenic and no aneugenic effects
CHO Chromosomal Aberration Study -
No clastogenic effects reported
Rat, 2 week oral study, dietary - 20 G/KG
Moderately Toxic
Rat, 90 day oral feeding study - 22.5 G/KG
Moderately Toxic

Acute Overexposure Effects:

Prolonged or repeated contact may result in moderate eye or skin irritation.
In some individuals, acute and chronic overexposure to phytase can result in sensitization that may be expressed as allergic dermatitis, allergic rhinitis, or occupational asthma.
Inhalation may result in respiratory irritation. Ingestion may result in gastric disturbances.

Chronic Overexposure Effects:

There are no other known chronic effects associated with this material.

First Aid Procedures - Skin:

Wash affected areas with soap and water. Remove and launder contaminated clothing before reuse. If irritation develops, get medical attention.

SECTION 5 - HEALTH EFFECTS (cont)

First Aid Procedures - Eyes:

Immediately rinse eyes with running water for 15 minutes. If irritation develops, get medical attention.

First Aid Procedures - Ingestion:

If swallowed, dilute with water and immediately induce vomiting. Never give fluids or induce vomiting if the victim is unconscious or having convulsions. Get immediate medical attention.

First Aid Procedures - Inhalation:

Move to fresh air. Aid in breathing, if necessary, and get immediate medical attention.

First Aid Procedures - Notes to Physicians:

None known.

First Aid Procedures - Aggravated Medical Conditions:

No data is available which addresses medical conditions that are generally recognized as being aggravated by exposure to this product. Please refer to the effects of overexposure section for effects (if any) observed in animals.

First Aid Procedures - Special Precautions:

None

SECTION 6 - REACTIVITY DATA

Stability Data:

Stable

Incompatibility:

None known.

Conditions/Hazards to Avoid:

Avoid dust cloud formation.

Hazardous Decomposition/Polymerization:

Hazardous decomposition products: None known.

Polymerization: Does not occur.

Corrosive Properties:

Not Corrosive.

Oxidizer Properties:

Not an oxidizer

Stable up to 75 Deg. C.

SECTION 7 - PERSONAL PROTECTION

Clothing:

Gloves, coveralls, apron, and boots as necessary to prevent contact.

Eyes:

Chemical Goggles

Respiration:

If dusts are generated, wear an approved dust respirator.

Ventilation:

Use local exhaust to control dusts.

Explosion Proofing:

None required.

NATUPHOS® 1200 enzyme powder
NCN 597119

SECTION 8 - SPILL-LEAK/ENVIRONMENTAL

General:

Spills should be contained and placed in suitable containers for disposal in a licensed facility. This material is not regulated by RCRA or CERCLA ("Superfund"). Wear appropriate respiratory protection and protective clothing and provide adequate ventilation during clean-up.

Waste Disposal:

Incinerate in a licensed facility. Do not discharge into waterways or sewer systems without proper authority.

Container Disposal:

Dispose of in a licensed facility. Recommend crushing or other means to prevent unauthorized reuse.

Environmental Toxicity Test Data:

Elimination (OECD Test 302 B) - > 70 PERCENT
Easy to eliminate
Elimination (OECD 301E) - > 70 PERCENT
Slightly biodegradable
Activ. sludge threshold inhibition conc. - EC20 > 1000 MG/L
Insignificant Hazard
Daphnia magna, 48 hr static EC50 - > 100 MG/L
Practically Nontoxic

SECTION 9 - STORAGE AND HANDLING

General:

Store at moderate temperatures, in tight containers.

SECTION 10 - REGULATORY INFORMATION

TSCA Inventory Status

Listed on Inventory: NO

This product is not hazardous according to the OSHA Hazard Communication Standard.

SECTION 11 - TRANSPORTATION INFORMATION

DOT Proper Shipping Name:

N/A

DOT Technical Name:

N/A

DOT Primary Hazard Class:

N/A

DOT Secondary Hazard Class:

N/A

DOT Label Required:

N/A

DOT Placard Required:

N/A

DOT Poison Constituent:

N/A

BASF Commodity Codes: 452 452 UN/NA Code: E/R Guide:

Bill of Lading Description:

SECTION 11 - TRANSPORTATION INFORMATION (cont)

NOT REGULATED BY THE DEPARTMENT OF TRANSPORTATION

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END OF DATA SHEET