

SAFETY DATA SHEET

N-PHOS ENHANCED

Page: 1

Printed: 26/07/2021

Revision: 26/07/2021

Supersedes Revision: 03/29/2016

according to Regulation (EC) No. 1907/2006 as amended by (EC) No. 2015/830 and US OSHA HCS 2015

Section 1. Identification of the Substance/Mixture and of the Company/Undertaking

- 1.1 Product Code:** FG4U426, FG4U427, FG4U428 FG4U429
Product Name: N-PHOS ENHANCED
- 1.2 Relevant identified uses of the substance or mixture and uses advised against:**
- 1.3 Details of the Supplier of the Safety Data Sheet:**
Company Name: Stoller Australia
1 Cresswell Road
Largs Bay
South Australia 5016, Australia
Web site address: www.stoller.com.au
Email address: stoller@stoller.com.au
Information: 1800 337-845
- 1.4 Emergency telephone number:**
Emergency Contact: STOLLER PRODUCTION CHEMIST
Contact number: 08 8169-0988

Section 2. Hazards Identification

- 2.1 Classification of the Substance or Mixture:**
Serious Eye Damage/Eye Irritation, Category 2
Acute Toxicity: Skin, Category 4
Acute Toxicity: Oral, Category 5
Acute Toxicity: Oral, Category 4

- 2.2 Label Elements:**



GHS Signal Word: Warning

GHS Hazard Phrases:

H302 - Harmful if swallowed.

H303 - May be harmful if swallowed.

H312 - Harmful in contact with skin.

H319 - Causes serious eye irritation.

GHS Precaution Phrases:

P264 - Wash hands thoroughly after handling.

P270 - Do not eat, drink or smoke when using this product.

P280 - Wear protective gloves/protective clothing/eye protection/face protection.

GHS Response Phrases:

P301+312 - IF SWALLOWED: Call a POISON CENTER or doctor/physician if you feel unwell.

P302+352 - IF ON SKIN: Wash with plenty of soap and water.

P305+351+338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P312 - Call a POISON CENTER or doctor/physician if you feel unwell.

P330 - Rinse mouth.

P337+313 - If eye irritation persists, get medical advice/attention.

P362+364 - Take off contaminated clothing and wash it before reuse.

GHS Storage and Disposal Phrases:

P501 - Dispose of contents/container to permitted waste facility.

SAFETY DATA SHEET

N-PHOS ENHANCED

- 2.3 Adverse Human Health** Acute: Depending on the duration of contact, overexposure can irritate the eyes, skin, **Effects and Symptoms:** mucous membranes and any other exposed tissue.
Chronic: Not known. Expected toxicity hazard: slight to moderate.
- 2.3.1 Inhalation:** Causes respiratory tract irritation.
- 2.3.2 Skin Contact:** May be harmful if absorbed through skin.
May cause skin irritation.
- 2.3.3 Eye Contact:** Causes eye irritation.
Causes redness and pain.
- 2.3.4 Ingestion:** Harmful if swallowed. May cause cardiac disturbances. May cause irritation of the digestive tract.

Section 3. Composition/Information on Ingredients

CAS #	Components (Chemical Name)/ REACH Registration No.	Concentration	EC No./ EC Index No.	GHS Classification
10043-35-3	Boric acid	< 2.0 %	233-139-2 005-007-00-2	Toxic Repro. 1B: H360FD
10102-40-6	Sodium molybdate	< 0.1 %	NA NA	Acute Tox.(O) 4: H302 Acute Tox.(D) 4: H312 Acute Tox.(I) 4: H332 Skin Corr. 2: H315 Eye Damage 2A: H319 STOT (SE) 3: H335 H336
7664-38-2	Phosphoric acid	<10.0 %	231-633-2 015-011-00-6	Skin Corr. 1B: H314
7646-85-7	Zinc chloride	< 3.0 %	231-592-0 030-003-00-2	Acute Tox.(O) 4: H302 Skin Corr. 1B: H314 Aquatic (A) 1: H400 Aquatic (C) 1: H410
77-92-9	Citric acid	< 5.0 %	201-069-1 NA	Eye Damage 2: H319
7758-99-8	Copper(II) sulfate pentahydrate	< 0.5 %	231-847-6 029-023-00-4	Acute Tox.(O) 4: H302 Skin Corr. 2: H315 Eye Damage 2A: H319 Eye Damage 2B: H320 Skin Sens. 1: H317 Mutagen 2: H341 Toxic Repro. 2: H361 STOT (SE) 1: H370 STOT (RE) 1: H372 STOT (RE) 2: H373 Aquatic (A) 1: H400 Aquatic (C) 1: H410
7786-30-3	Magnesium chloride	< 4.0 %	232-094-6 NA	No data available.
7758-94-3	Ferrous chloride	< 0.5 %	231-843-4 NA	Corrosive 1: H290 Acute Tox.(O) 4: H302 Eye Damage 1: H318
10026-24-1	Cobalt sulfate heptahydrate	< 0.2 %	NA NA	Acute Tox.(O) 4: H302 Skin Sens. 1: H317 Resp. Sens. 1: H334 Mutagen 2: H341

SAFETY DATA SHEET

N-PHOS ENHANCED

				Carcinogen 1B: H350 Toxic Repro. 1B: H360 Aquatic (A) 1: H400 Aquatic (C) 1: H410
57-13-6	Urea	<12.0 %	200-315-5 NA	No data available.
10034-96-5	Manganese sulfate	< 1.0 %	NA NA	Mutagen 2: H341
1310-58-3	Potassium hydroxide	< 5.0 %	215-181-3 019-002-00-8	Acute Tox.(O) 4: H302 Skin Corr. 1A: H314
7722-76-1	Monoammonium phosphate	<20.0 %	231-764-5 NA	Skin Corr. 2: H315 Eye Damage 2A: H319 STOT (SE) 3: H335 H336

Section 4. First Aid Measures

- 4.1 Description of First Aid:** Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.
- Measures:** dangerous area.
- In Case of Inhalation:** Remove from exposure and move to fresh air immediately. If not breathing give artificial respiration. If breathing becomes difficult, call a physician.
- In Case of Skin Contact:** Flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Consult a physician.
- In Case of Eye Contact:** Call a physician if irritation persists. Flush eyes with plenty of water for at least 15 minutes, occasionally lifting the upper and lower eyelids.
- In Case of Ingestion:** Drink plenty of water. Call a physician or poison control center immediately for advice on inducing vomiting. Do not induce vomiting or give anything by mouth to an unconscious person.
- Note for the Doctor:** Treat symptomatically and supportively.
- 4.3 Indication of any immediate medical attention and special treatment needed:** No data available.

Section 5. Fire Fighting Measures

- 5.1 Suitable Extinguishing Media:** Use water spray, dry chemical, carbon dioxide, or alcohol-resistant foam. Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.
- 5.2 Flammable Properties and Hazards:** No data available.
- Hazardous Combustion Products:** N.A.
- Flash Pt:** No data.
- Explosive Limits:** LEL: No data. UEL: No data.
- Autoignition Pt:** No data.
- 5.3 Fire Fighting Instructions:** Wear self contained breathing apparatus for fire fighting if necessary. Further information: The product itself does not burn. No data available.

Section 6. Accidental Release Measures

- 6.1 Protective Precautions, Protective Equipment and Emergency Procedures:** Use personal protective equipment. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. For personal protection see section 8. Avoid dust formation. Avoid breathing dust.
- 6.2 Environmental Precautions:** If spilling or leakage occurs, contain and clean if safe to do so. Prevent from reaching drains, sewer, or waterways. Do not let product enter drains. Discharge into the environment must be avoided. Methods and materials for containment and cleaning up: Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal. Pick up and arrange disposal without creating dust. Sweep up and shovel.
- 6.3 Methods and Material For Containment and Cleaning Up:** Personal precautions.
Use personal protective equipment. Avoid dust formation. Avoid breathing dust. Ensure adequate ventilation.
- Environmental precautions.
If spilling or leakage occurs, contain and clean if safe to do so. Prevent from reaching drains, sewer, or waterways. Do not let product enter drains. Discharge into the environment must be avoided.
Methods for cleaning up.
Pick up and arrange disposal without creating dust. Keep in suitable, closed containers for disposal. Sweep up and shovel.

Section 7. Handling and Storage

- 7.1 Precautions To Be Taken in Handling:** Avoid contact with skin and eyes. Avoid inhalation of vapor or mist. For precautions see section 2. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed.
- 7.2 Precautions To Be Taken in Storing:** Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage. Keep in a dry place. Store in a cool, dry place, away from food, feed, clothing materials and living quarters. Whenever possible, place chemicals on secondary containers or diked area. Inspect all incoming containers before storage to ensure all are properly labeled and not damaged. Keep containers tightly closed when not in use. Moisture sensitive.

Section 8. Exposure Controls/Personal Protection

8.1 Exposure Parameters:

CAS #	Chemical Name	Jurisdiction	Recommended Exposure Limits	Notations
10043-35-3	Boric acid	ACGIH TLV	TLV: 2 mg/m ³ STEL: 6 mg/m ³	
10102-40-6	Sodium molybdate	ACGIH TLV	TLV: 5 mg/m ³ as Mo	
		OSHA PELs	PEL: 5 mg/m ³ as Mo	
7664-38-2	Phosphoric acid	ACGIH TLV	TLV: 1 mg/m ³ STEL: 3 mg/m ³	
		Austria	TWA: 1 mg/m ³ () STEL: 3 mg/m ³ ()	
		OSHA PELs	PEL: 1 mg/m ³	
7646-85-7	Zinc chloride	ACGIH TLV	TLV: 1 mg/m ³ STEL: 2 mg/m ³	
		Austria	TWA: 1 mg/m ³ () STEL: 2 mg/m ³ () (Fume)	

SAFETY DATA SHEET

N-PHOS ENHANCED

7646-85-7 Zinc chloride (continued)	OSHA PELs	PEL: 1 mg/m3	
7758-99-8 Copper(II) sulfate pentahydrate	ACGIH TLV	TLV: 1 mg/m ³ as Cu	
7758-94-3 Ferrous chloride	ACGIH TLV	TLV: 1 mg/m ³ as Fe	
10026-24-1 Cobalt sulfate heptahydrate	ACGIH TLV	TLV: 100 mg/m ³ as Co	
10034-96-5 Manganese sulfate	ACGIH TLV	TLV: 0.2 mg/m ³ as Mn	
	Austria	TWA: 1 mg/m3 () STEL: () (Total dust)	
	OSHA PELs	CEIL: 5 mg/m3	
1310-58-3 Potassium hydroxide	ACGIH TLV	CEIL: 2 mg/m3	
	Austria	TWA: 2 Peak limitation () STEL: ()	
7722-76-1 Monoammonium phosphate	ACGIH TLV	TLV: 10 mg/m ³	

8.2 Exposure Controls:

8.2.1 Engineering Controls (Ventilation etc.): Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

8.2.2 Personal protection equipment:

Eye Protection: Tightly fitting safety goggles. Faceshield (8-inch minimum). Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166(EU). Safety glasses with side-shields conforming to EN166. Safety glasses.

Protective Gloves: Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands. Full contact.

Other Protective Clothing: Complete suit protecting against chemicals. Choose body protection according to the amount and concentration of the dangerous substance at the work place. Impervious clothing.

Respiratory Equipment (Specify Type): Where risk assessment shows air-purifying respirators are appropriate use a full-face respirator with multi- purpose combination (US) or type ABEK (EN 14387) respirator cartridges as a backup to engineering controls. If the respirator is the sole means of protection, use a full-face supplied air respirator.

Work/Hygienic/Maintenance Practices: Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.

8.2.3 Environmental Exposure Controls: If spilling or leakage occurs, contain and clean if safe to do so. Prevent from reaching drains, sewer, or waterways. Do not let product enter drains. Discharge into the environment must be avoided.

Section 11. Toxicological Information

11.1 Information on

Toxicological Effects:

CAS# 10043-35-3: Boric acid:

Acute toxicity, LD50, Oral, Rat, 2660. MG/KG.

Result:

Gastrointestinal:Hypermotility, diarrhea.

Gastrointestinal:Nausea or vomiting.

- Journal of the American Medical Association, American Medical Association, 535 N. Dearborn St., Chicago, IL 60610, Vol/p/yr: 128,266, 1945

CAS# 7664-38-2: Phosphoric acid:

Acute toxicity, LD50, Oral, Rat, 1530. MG/KG.

Result:

Behavioral: Somnolence (general depressed activity).

Kidney, Ureter, Bladder:Hematuria.

Skin and Appendages: Other: Hair.

- BIOFAX Industrial Bio-Test Laboratories, Inc., Data Sheets., Vol/p/yr: 17-4, 1970

Acute toxicity, LD50, Skin, Species: Rabbit, 2740. MG/KG.

Result:

Behavioral: Somnolence (general depressed activity).

Behavioral: Excitement.

- BIOFAX Industrial Bio-Test Laboratories, Inc., Data Sheets., Vol/p/yr: 17-4, 1970

CAS# 7646-85-7: Zinc chloride:

Acute toxicity, LD50, Oral, Rat, 350.0 MG/KG.

Result:

Gastrointestinal:Nausea or vomiting.

Blood:Change in clotting factors.

- Food Research., For publisher information, see JFDSA Z, Champaign, IL, Vol/p/yr: 7,313, 1942

CAS# 7758-99-8: Copper(II) sulfate pentahydrate:

Acute toxicity, LD50, Oral, Rat, 300.0 MG/KG.

Result:

Behavioral: Altered sleep time (including change in righting reflex).

Behavioral: Change in motor activity (specific assay).

Behavioral: Antipsychotic.

- "Agricultural Chemicals," 1976/77 revision, Thomson, W.T., 4 vols., Thomson Publications, Fresno, CA, Vol/p/yr: 2,182, 1977

CAS# 10026-24-1: Cobalt sulfate heptahydrate:

Acute toxicity, LD50, Oral, Rat, 582.0 MG/KG.

Result:

Behavioral: Somnolence (general depressed activity).

Behavioral: Ataxia.

Gastrointestinal:Hypermotility, diarrhea.

- Acute Toxicity Data. Journal of the American College of Toxicology, Part B., Mary Ann Liebert, Inc., 1651 Third Ave., New York, NY 10128, Vol/p/yr: 1,688, 1992

CAS# 57-13-6: Urea:

SAFETY DATA SHEET

N-PHOS ENHANCED

Page: 8

Printed: 26/07/2021

Revision: 26/07/2021

Supersedes Revision: 03/29/2016

Acute toxicity, LD50, Oral, Rat, 8471. MG/KG.

Result:

Autonomic Nervous System: Other (direct) parasympathomimetic.

Behavioral: Coma.

Gastrointestinal:Hypermotility, diarrhea.

- Gigena i Sanitariya, Mezhdunarodnaya Kniga, ul. B. Yakimanka, 39, 113095, Moscow
113095 Russia, Vol/p/yr: 51(6),8, 1986

CAS# 1310-58-3: Potassium hydroxide:

Acute toxicity, LD50, Oral, Rat, 273.0 MG/KG.

Result:

Tumorigenic: Equivocal tumorigenic agent by RTECS criteria.

Lungs, Thorax, or Respiration: Tumors.

Liver: Tumors.

- Fundamental and Applied Toxicology., Academic Press, Inc., 1 E. First St., Duluth, MN
55802, Vol/p/yr: 8,97, 1987

Sensitization: No data available.

Carcinogenicity/Other Information: IARC: No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC. ACGIH: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by ACGIH. NTP: No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP. OSHA: No component of this product present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA. Mouse. Oral. Tumorigenic: Equivocal tumorigenic agent by RTECS criteria. Endocrine:Thyroid tumors.

Carcinogenicity: NTP? No IARC Monographs? No OSHA Regulated? No

Section 12. Ecological Information

- 12.1 Toxicity:** No data available.
- 12.2 Persistence and Degradability:** No data available.
- 12.3 Bioaccumulative Potential:** No data available.
- 12.4 Mobility in Soil:** No data available.
- 12.5 Results of PBT and vPvB assessment:** PBT/vPvB assessment not available as chemical safety assessment not required/not conducted.
- 12.6 Other adverse effects:** An environmental hazard cannot be excluded in the event of unprofessional handling or disposal. Very toxic to aquatic life. Toxic to aquatic life. Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment. No data available.

Section 13. Disposal Considerations

- 13.1 Waste Disposal Method:** **PRODUCT:**
Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.
Contaminated packaging: Observe all federal, state, and local environmental regulations. Dispose of as unused product.

Section 14. Transport Information

- 14.1 LAND TRANSPORT (US DOT):**
DOT Proper Shipping Name: Not Regulated. Trade Name: N-PHOS ENHANCED
DOT Hazard Class:
UN/NA Number:
- 14.1 LAND TRANSPORT (European ADR/RID):**
ADR/RID Shipping Name:
UN Number:
Hazard Class:
- 14.2 MARINE TRANSPORT (IMDG/IMO):**
IMDG/IMO Shipping Name: Not Regulated. Trade Name: N-PHOS ENHANCED
- 14.3 AIR TRANSPORT (ICAO/IATA):**
ICAO/IATA Shipping Name: Not Regulated. Trade Name: N-PHOS ENHANCED

Section 15. Regulatory Information

Section 16. Other Information

- Revision Date:** 26/07/2021
- Additional Information About This Product:** No data available.
- Company Policy or Disclaimer:** Stoller believes the information contained in this Safety Data Sheet is accurate based on the information provided by reputable suppliers of our raw materials. However, Stoller does not guarantee their accuracy or completeness. The information contained herein is furnished without warranty of any kind, whether expressed or implied, as to the safety of the goods, the merchantability of the goods, or the fitness of the goods for any particular purpose. Users should consider these data only as a supplement to other information gathered by them and must make independent determination of suitability and completeness of information from all sources to assure proper use and disposal of these materials and the safety and health of employees and customers. Stoller assumes no responsibility for results obtained or for incidental or consequential damages arising from the use of goods and data.