



MATERIAL SAFETY DATA SHEET

Date stamp: 03-Jul-2013

MSDS Ref. No.: E90251

Revision Number: 1

1. PRODUCT AND COMPANY IDENTIFICATION

Product Name: Nursery Mix 23-4-8 12-14M

Description: Controlled Release Fertilizer

Company

Everris NA Inc.
P.O. Box 3310
Dublin, OH 43016

Formula No.: S15833

Product Number(s): E90251

24-HOUR EMERGENCY TELEPHONE NUMBERS:

CHEMTREC (U.S.): 1-800-424-9300
CHEMTREC (International): 1-703-527-3887
Non-Emergency Calls: 1-800-492-8255

2. Hazards Identification

Labelling

Signal Word: CAUTION

precautionary statements

May cause eye/skin irritation. Do not ingest. Do not inhale. Keep out of reach of children and domestic animals.

Potential Health Effects

Eye contact: Contact with eyes may cause irritation.

Skin contact: Substance may cause slight skin irritation.

Ingestion: Considered practically non-toxic. Possible gastrointestinal tract irritation.

Inhalation: May cause irritation of respiratory tract.

Aggravated Medical Conditions: Inhalation may aggravate asthma.

Principle routes of exposure: skin, Inhalation, Ingestion

3. Composition/information on Ingredients

Ingredients	CAS-No	Weight %
Ammonium Nitrate, NH ₄ NO ₃	6484-52-2	40 - 60
Potassium sulphate, K ₂ SO ₄	7778-80-5	30 - 40
Di ammonium phosphate, (NH ₄) ₂ HPO ₄	7783-28-0	15-30
Calciumphosphate, Ca ₃ (PO ₄) ₂	7758-87-4	15-30
Ammonium phosphate (US)	7722-76-1	15-30
Coating	PROPRIETARY	15-30
Urea	57-13-6	10 - 30
Iron Oxide, Fe ₂ O ₃	1309-37-1	0.1 - 1
Magnesium oxide, MgO	1309-48-4	0.1 - 1
Magnesium sulphate anhydrous, MgSO ₄	7487-88-9	0.1 - 1
Manganese sulphate, MnSO ₄ +1H ₂ O	7785-87-7	0.1 - 1
Zinc Sulfate Anhydrous	7733-02-0	0.1 - 1
Zinc oxide, ZnO	1314-13-2	0.1 - 1
Copper sulphate anh; CuSO ₄	7758-98-7	< 0.1
Ferrous Sulfate Monohydrate (Iron Sulfate)	17375-41-6	< 0.1
Manganese Oxide, MnO	1344-43-0	< 0.1
Copper Oxide, CuO	1317-38-0	-

4. First aid measures

Eye contact:

Hold eye open and rinse slowly and gently with water for 15-20 minutes. Remove contact lenses, if present after the first 5 minutes, then continue rinsing eye. Call a poison control center or doctor for treatment advice.

Skin contact:	Take off contaminated clothing. Rinse skin immediately with plenty of water for 15-20 minutes. Call a poison control center or doctor for treatment advice.
Ingestion:	Call a poison control center or doctor immediately for treatment advice. Have person sip a glass of water if able to swallow. Do not induce vomiting unless told to do so by a poison control center or doctor. Do not give anything by mouth to an unconscious person.
Inhalation	Move person to fresh air. If person is not breathing, call 911 or an ambulance, then give artificial respiration, preferably by mouth-to-mouth, if possible. Call a poison control center or doctor for further treatment advice.

5. Fire-fighting measures

Flammable properties:	Decomposes on heating. May burn under fire conditions.
Suitable extinguishing media:	Water.
Explosion potential:	Dust clouds may be explosive.
Hazardous combustion products	Combustion can produce toxic fumes and irritating gases.
Fire fighting procedures:	Select appropriate method to surround and extinguish fire.
Special protective equipment for firefighters:	In the event of fire, wear self-contained breathing apparatus.

6. Accidental release measures

Personal Precautions:	Wear personal protective equipment.
Environmental Precautions:	Prevent product from entering drains.
Methods for containment:	Use good housekeeping practices. Clean up promptly by sweeping or vacuum.
Methods for cleaning up:	If material is uncontaminated, collect and reuse as recommended for product.

7. Handling and Storage

Handling: Avoid container breakage.

Storage: Store in a cool, dry area away from incompatible materials and heat sources.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Ingredients	CAS-No	ACGIH:	OSHA:
Ammonium Nitrate, NH ₄ NO ₃	6484-52-2	N.A.	N.A.
Potassium sulphate, K ₂ SO ₄	7778-80-5	Not Listed	Not Listed
Di ammonium phosphate, (NH ₄) ₂ HPO ₄	7783-28-0	Not Listed	Not Listed
Calciumphosphate, Ca ₃ (PO ₄) ₂	7758-87-4	Not Listed	Not Listed
Ammonium phosphate (US)	7722-76-1	Not Listed	Not Listed
Coating	PROPRIETARY	Not Listed	Not Listed
Urea	57-13-6	Not Listed	Not Listed
Iron Oxide, Fe ₂ O ₃	1309-37-1	5 mg/m ³ TWA	10 mg/m ³ TWA 15 mg/m ³ TWA Rouge 5 mg/m ³ TWA Rouge
Magnesium oxide, MgO	1309-48-4	10 mg/m ³ TWA	15 mg/m ³ TWA
Magnesium sulphate anhydrous, MgSO ₄	7487-88-9	Not Listed	Not Listed
Manganese sulphate, MnSO ₄ +1H ₂ O	7785-87-7	Not Listed	Not Listed
Zinc Sulfate Anhydrous	7733-02-0	Not Listed	Not Listed
Zinc oxide, ZnO	1314-13-2	2 mg/m ³ TWA	5 mg/m ³ TWA 15 mg/m ³ TWA
Copper sulphate anh; CuSO ₄	7758-98-7	Not Listed	Not Listed
Ferrous Sulfate Monohydrate (Iron Sulfate)	17375-41-6	Not Listed	Not Listed
Manganese Oxide, MnO	1344-43-0	Not Listed	Not Listed
Copper Oxide, CuO	1317-38-0	Not Listed	Not Listed

Engineering Controls

Use adequate ventilation to keep the airborne concentrations of this material below the recommended exposure standard.

Personal protective equipment

Eye/face Protection

Eye/face protection is not required, but is recommended in manufacturing situations where contact may occur.

Skin and body protection:

Wear suitable protective clothing if contact is anticipated during manufacturing. Impervious gloves.

Respiratory Protection:

If airborne levels are high or product does not remain intact, use a combination of engineering controls (e.g. ventilation) and personal protection, e.g., NIOSH/MSHA approved respirator for dusts, mists, and fumes.

General hygiene considerations:

Wash hands before breaks and immediately after handling the product.

9. Physical and Chemical Properties

Physical state	Solid	Color:	Tan
Bulk density:	55-65 lbs/cu.ft.	Flash Point:	not applicable
Appearance:	granulate	Odor:	oily

10. Stability and Reactivity

Chemically Stable:	yes.
Conditions to Avoid	Damp or wet conditions. Extreme heat. Take precautionary measures against static discharges.
Materials to avoid	Combustible material. Strong bases. Oxidizing agent. Reducing agents.
Hazardous decomposition products:	Toxic fumes and gases may be generated. Metal oxides possible.
Possibility of Hazardous Reactions	Poses little or no immediate hazard.

11. Toxicological Information

Acute Toxicity

Eye effects: Contact with eyes may cause irritation
Skin effects: May cause skin irritation and/or dermatitis

Chronic Toxicity

Carcinogenic effects: The table below indicates whether each agency has listed any ingredient as a carcinogen.

Ingredients	NTP:	IARC:	OSHA:
Iron Oxide, Fe2O3	Not Listed	3	Not Listed

General information Prolonged or repeated exposure may irritate eyes and skin
Ingestion: Health injuries are not known or expected under normal use.
Inhalation Health injuries are not known or expected under normal use.

12. Ecological Information

Ecotoxicity effects:	No data is available on the product itself.
Persistence and degradability:	Inherently biodegradable. Non-persistent.
Bioaccumulative potential:	Does not bioaccumulate.
Mobility:	Slightly water contaminating.
Aquatic toxicity:	May be beneficial to plant life.
Additional ecological information:	Do not apply directly to lakes, streams, or ponds.

13. Disposal Considerations

Waste Disposal Methods: Apply as fertilizer to field. Dispose of in accordance with local regulations and national regulations.
Contaminated packaging: Do not re-use empty containers. If empty, place in trash or offer for recycling if available.

14. TRANSPORT INFORMATION

The description shown may not apply to all situations. Consult 49 CFR, or appropriate dangerous goods regulations for additional description requirements (e.g. technical name) and mode-specific or quantity-specific shipping requirements.

DOT (Land)	Not DOT regulated
DOT (AIR)	UN2071, Ammonium Nitrate Based Fertilizer, 9, PGIII
DOT (Vessel)	UN2071, Ammonium Nitrate Based Fertilizer, 9, PGIII

15. Regulatory information			
Ingredients	CAS-No	CERCLA/SARA 313	CERCLA/SARA 302
Ammonium Nitrate, NH4NO3	6484-52-2	Not listed	Not Listed
Zinc Sulfate Anhydrous	7733-02-0	1000 lb final RQ 454 kg final RQ	Not Listed
Copper sulphate anh; CuSO4	7758-98-7	10 lb final RQ 4.54 kg final RQ	Not Listed

General information Contact local authorities for disposal of large quantities of product.

16. Other information

NFPA: **Health:** 1 **Flammability:** 1 **Reactivity:** 0

HMIS: **Health:** 1 **Flammability:** 1 **Reactivity:** 0

Hazard Rating: 0=Least; 1-Slight; 2=Moderate; 3=High; 4=Severe

General comment: This document contains health, safety, and environmental information useful to emergency response agencies, health care providers, manufacturers, and workers/employees. It does not replace the precautionary language, use directions, or the storage and disposal information found on the product label.

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