



Material Safety Data Sheet

8-4-16 Endurance™

SECTION 1

COMPANY IDENTIFICATION

Manufactured for Turfgrass Management, Inc. D.B.A.,
Grigg Brothers, PO BOX 128, Albion, Idaho, 83311
08:00–17:00 MST, Mon-Fri: **1.800.246.8873**
EMERGENCY NUMBER: After hours, holiday's, and all
other non business hours call:
Poison Control 800.222.1222, Chemtrec 800.424.9300

PRODUCT IDENTIFICATION

GRIGG BROTHERS ID: #1340
COMMON NAME: 8-4-16 Endurance™
CHEMICAL DESCRIPTION: Organic / Inorganic fertilizer
combination and compounds listed below.
CHEMICAL ACTIVITY: 8% N, 4% P, 16% K, 8% Ca, 6% S,
3% Fe, .20% Mn, .20% Zn

SECTION 2

COMPOSITION:

This is a homogeneous granular product
containing:

INGREDIENTS / CAS NUMBER:

Ammonium Phosphate #7722-76-1
Urea #5113-6
Sulfate of Potash #7778-80-5
Ferrous Sulfate #7720-78-7
Iron Sucrate -- Unk
Manganese Sucrate -- Unk
Zinc Sucrate -- Unk
Blood Meal -- Unk
Bone Meal -- Unk
Kelp -- Unk
Calcium Sulfate --Unk

SECTION 3

HAZARDS IDENTIFICATION:

Ingestion: Minimal hazard under normal
conditions and use. Ingestion of large quantities
may cause gastrointestinal discomfort, vomiting,
weakness or other medically related problems.

Inhalation: Dusty conditions may cause
mechanical aggravation to respiratory mucous
membranes.

Eye Contact: Dust from this product may cause
particulate discomfort to eyes.

Skin Absorption: Not normally absorbed through
the skin.

Effects of Overdose: Ingestion of large doses
may cause diarrhea, nausea, abdominal cramps or
formation of methemoglobinemia. Seek medical
attention.

SECTION 4

FIRST AID MEASURES:

Ingestion: If large amount is ingested, give 2-3
glasses of water and induce vomiting. Seek
medical attention.

Inhalation: Dusty conditions may cause
mechanical aggravation to respiratory mucous
membranes.

Eyes: Flush eyes with running water for at least 15
minutes. Seek medical attention if condition
persists.

Skin: Wash with soap and water. Seek medical
attention if condition persists.

Notes to Physician: Consult standard literature.
Treatment based on the sound judgment of the
physician and the individual reactions of the
patient.

SECTION 5

FIRE FIGHTING MEASURES:

Extinguishing Media: Use media suitable to
extinguish source of fire.

Special Fire Fighting Procedures: Product is not
combustible.

Unusual Fire and Explosion Hazards: During
extremely high temperature fire conditions, the
product may reach melting point and decompose
to release NH₃, SO_x, PO_x, or CN.

SECTION 6

ACCIDENTAL RELEASE MEASURES:

Environmental Precautions: Keep out of
water supplies, lakes, ponds, streams and rivers.
This product is a fertilizer and may promote algae
growth.

**Steps to be taken in case material is released
or spilled:** Keep from entering waterways.
Sweep up material and place in suitable container
for use as a fertilizer or for disposal.

SECTION 7

HANDLING AND STORAGE:

**Precautions to be taken in handling and
storage:** Store in a cool, dry area. Prevent
spillage and separate from strong oxidizers. Use
normal safety procedures and good personal
hygiene. Keep out of the reach of children.

SECTION 8

EXPOSURE CONTROLS / PERSONAL PROTECTION:

Ventilation Protection: Adequate ventilation.

Respiratory Protection: Approved dust respirator
when necessary.

Protective Clothing: Normal clean work clothing.

Eye Protection: In dusty conditions, safety
glasses with side shields or goggles may be
necessary.

SECTION 9

PHYSICAL AND CHEMICAL PROPERTIES:

Boiling Point: Not applicable

Solubility in Water: Slowly soluble in soil and
water.

% Volatiles (by volume): Not applicable.

Flashpoint: 400°F

Vapor Pressure, mm Hg: Not applicable.

pH: Not listed.

Reaction with water: None

Appearance: Solid, brown granules.

Odor: Fertilizer salt.

Extinguishing Media: Water, foam or CO₂.

SECTION 10

STABILITY AND REACTIVITY:

Stability (Normal Conditions): Stable.

Conditions to Avoid: Extremely high
temperatures.

Incompatibility (Material to Avoid): Prolonged
contact may cause oxidation of unprotected
metals.

Hazardous Decomposition Products: During
extremely high temperature fire conditions, the
product may reach melting point and decompose
to release NH₃, SO_x, PO_x, or CN.

Hazardous Polymerization: Will not occur.

Conditions to Avoid: Not applicable.

SECTION 11

TOXICOLOGY INFORMATION:

Ingestion: Acute Oral Toxicity LD₅₀: 511 mg/kg
for Urea; 2200 mg/kg for Iron Sulfate.

SECTION 12

ECOLOGICAL INFORMATION:

None listed.

SECTION 13

DISPOSAL CONSIDERATIONS:

Dispose of in accordance with local, state and
federal regulations.

SECTION 14

TRANSPORT INFORMATION:1

Shipping name: Not regulated by D.O.T.

Hazard Class: None

C.A.S. Number: See Section 2

Reportable Quantity (RQ): None

D.O.T. Number: None

Labels Required: None

Haz Waste No: None

Placard: None

EPA Regist No: None

SECTION 15

REGULATORY INFORMATION:

Carcinogenicity:

By IARC?: **No** by NTP?: **No**

This product contains Manganese and Zinc, which
are subject to reporting requirements of Section
313 of Title III of the Superfund and
Reauthorization Act of 1986 and 40 Part 372.

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