



Material Safety Data Sheet

Manganese Combo™

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, holidays, and
all other non business hours; call poison control
1.800.222.1222

PRODUCT IDENTIFICATION

GRIGG BROTHERS ID #: **192**
COMMON NAME: Manganese Combo™
CHEMICAL DESCRIPTION: Compounds listed below
CHEMICAL ACTIVITY: N 6%, K 2%, Mn 5%, Mg 1.2% Zn
1%, Cu 0.4%

SECTION 2

HAZARDOUS INGREDIENTS/ IDENTITY INFORMATION

INGREDIENTS / HAZARDOUS
COMPONENTS: (Specific Chemical Identity;
OSHA PEL ACGIH TLV C.A.S. NO. SARA
Common Name) (Mg/M³) (Mg/M³) %
Manganese Sulphate # **1100000**
Zinc Sulphate # **7733020**

SECTION 3

PHYSICAL/CHEMICAL CHARACTERISTICS

BOILING POINT: > **H₂O**
SPECIFIC GRAVITY: (H₂O=1) **1.35**
VAPOR PRESSURE: (MM HG) **N/A**
VAPOR DENSITY: (AIR=1) **N/A**
MELTING POINT: **N/A**
EVAPORATION RATE: < **H₂O**
pH: **2.38**
(BUTYL ACETATE=1) **N/A**
APPEARANCE AND ODOR:
Blue, slight odor

SECTION 4

FIRE AND EXPLOSION HAZARD DATA

FLASH POINT (METHOD): FLAMMABLE
LIMITS: LEL **N/A** UEL **N/A**
EXTINGUISHING MEDIA: **Water**
SPECIAL FIREFIGHTING PROCEDURES:
N/A
UNUSUAL FIRE & EXPLOSION HAZARDS:
N/A

SECTION 5

REACTIVITY DATA

STABILITY: **Stable**
CONDITIONS TO AVOID: **N/A**
INCOMPATIBILITY (MATERIALS TO
AVOID): **N/A**
HAZARD DECOMPOSITION OR BY-
PRODUCTS: **N/A**
HAZARD POLYMERIZATION: **May Not
Occur**
CONDITIONS TO AVOID: **N/A**

SECTION 6

HEALTH HAZARD DATA

PRODUCT: Manganese Combo™
TOXICITY: None Found
ROUTES (S) OF ENTRY: [Skin] [Ingestion]
CARCINOGENICITY: NTP: No
IARC Monographs: No
OSHA Regulated: No
HEALTH HAZARDS (ACUTE & CHRONIC) /
SIGNS & SYMPTOMS OF EXPOSURE:
This product may cause eye and skin
irritation (See Emergency and First Aid
Procedures).
EMERGENCY AND FIRST AID
PROCEDURES:
Eyes: Immediately flush eyes with plenty of
water for at least 15 minutes. Call a
Physician.
Skin: Wash contaminated areas with plenty
of water for 15 minutes. Remove
contaminated clothing and footwear and
wash clothing before reuse. If skin irritation
continues consult a physician.
Ingestion: Do not give anything by mouth to
an unconscious person. If swallowed do not
induce vomiting, give one or two glasses of
milk or water. Contact physician
immediately.

SECTION 7

PRECAUTION FOR SAFE HANDLING AND USE

FOR SAFE HANDLING AND USE
STEPS TO BE TAKEN IN CASE MATERIAL
IS RELEASED OR SPILLED: Absorb liquid
spills with a dry absorbent, containerize
usable material for disposal in an approved
waste facility.
WASTE DISPOSAL METHOD: Dispose in
closed containers, at an approved landfill, in
accordance with local, state and federal
regulations. Material may also be flushed
with water to a wastewater treatment
system.
PRECAUTIONS TO BE TAKEN IN
HANDLING AND STORING: Store in
enclosed containers.
OTHER PRECAUTIONS: Avoid ingestion,
contact with eyes, skin and clothing.

SECTION 8

CONTROL MEASURES

RESPIRATORY PROTECTION:
NIOSH/MSHA approved for mists. Use with
adequate ventilation and employ respiratory
protection when exposure to mist and spray
is possible.
VENTILATION: **N/A** (Have adequate
ventilation)
PROTECTIVE GLOVES: Impervious gloves.
EYE PROTECTION: Side shield safety
glasses or goggles.
OTHER PROTECTIVE CLOTHING AND
EQUIPMENT: Protective clothing to
minimize skin contact should be worn. Wear
chemically resistant safety shoes. Wash
contaminated clothing with soap and water
and dry before reuse. Safety showers and
eye wash facilities should be provided in all
areas in which this product is handled.
WORK/HYGIENIC PRACTICES: Good
housekeeping procedures should be
followed to minimize exposure.

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