

SAFETY DATA SHEET

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

FORMULATED FOR:

Fisher and Son, Inc.
110 Summit Drive
Exton, PA 19341
800.262.2127

PRODUCT NAME: ReGenerate MAN Up
CHEMICAL NAME: Inorganic/Organic Chemical Fertilizer Mixture
CHEMICAL FAMILY: Micronutrient mixed liquid blended fertilizer

Date of Issue: 2/2/16

2. HAZARDS IDENTIFICATION SUMMARY

KEEP OUT OF REACH OF CHILDREN - CAUTION - May cause mild eye and skin irritation. Avoid contact with skin, eyes, open cuts, and sores. In case of contact, flush with water. Get medical attention for eyes. This blended liquid fertilizer is a mixture of ferrous sulfate, manganese sulfate, magnesium sulfate, zinc sulfate, and citric acid. Nausea and vomiting could be expected upon large dose ingestion. The acute ingestive effects are described as nausea, chills, and diarrhea. Eye and skin contact with these products could cause irritation (particularly in sensitive persons), and respiratory irritation could be expected from the unprotected inhalation of fertilizer mists. Product users should avoid prolonged or repeated skin contact by wearing impervious gloves, long sleeve shirt, long pants, socks and rubber boots. Goggles for eye protection are recommended. Wash thoroughly after handling and using this product.



This product is a deep green color with a slight sulfur odor. Primary routes of entry are inhalation, eye contact and skin contact.

3. COMPOSITION, INFORMATION ON INGREDIENTS

MIXED LIQUID BLENDED FERTILIZERS – No hazardous ingredient exceeds 1% of mixture.

<u>Chemical Ingredients:</u>	<u>Percentage of Weight:</u>	<u>CAS No.</u>
Citric Acid	1.0	77-92-9
Iron	3.0	7788-63-0
Magnesium	1.0	7487-88-9
Manganese	4.0	7785-87-7

4. FIRST AID MEASURES

If in eyes: Flush eyes with clean running water for at least 15 minutes. If irritation persists, get medical attention.

If on skin: Remove contaminated clothing. Wash thoroughly with soap and water. If irritation persists, or if rash develops, get medical attention.

If swallowed: If conscious, drink 1 or 2 glasses of water. Get medical attention. Never induce vomiting or give anything by mouth to an unconscious person.

If inhaled: Remove to fresh air. If irritation persists, get medical attention.

5. FIRE FIGHTING MEASURES

FLASH POINT (°F/Test Method): Not applicable
FLAMMABLE LIMITS (LFL & UFL): Not applicable
EXTINGUISHING MEDIA: Use medium appropriate to surrounding fire. Dry chemical, carbon dioxide, foam, water spray or fog.
HAZARDOUS COMBUSTION PRODUCTS: May include but not limited to oxides of carbon, hydrogen chloride, hydrogen fluoride, oxides of nitrogen, ammonia, oxides of carbon, hydrogen chloride, hydrogen fluoride, oxides of nitrogen, ammonia, oxides of phosphorus, oxides of sulfur, hydrogen sulfide.
SPECIAL FIRE FIGHTING PROCEDURES: Use water spray to cool containers exposed to fire. Remain upwind. Avoid breathing smoke. Wear self-contained breathing apparatus and full protective gear.
UNUSUAL FIRE AND EXPLOSION HAZARDS: None known.

6. ACCIDENTAL RELEASE MEASURES

STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:
Avoid breathing mists. Absorb and sweep up spills immediately and transfer to suitable containers for possible land application according to label use or disposal. Check local, state and federal regulations for proper disposal.

CAUTION: Keep spills and cleaning runoff out of municipal sewers and open bodies of water.

7. HANDLING AND STORAGE

HANDLING: Avoid breathing fertilizer mists. Avoid prolonged or repeated skin contact. Avoid eye contact. Wash hands thoroughly after using this product and before eating, drinking, chewing gum, using tobacco or using the toilet.
STORAGE: Store in original containers only. Keep containers tightly closed when not in use. Store in a cool, dry well-ventilated area, preferably in a locked storage area away from children, feed, food products, and seed. Store at ambient temperatures. Do not contaminate water, food, or feed or disposal.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

ENGINEERING CONTROLS: Not normally required.
RESPIRATORY PROTECTION: Not normally required.
EYE PROTECTION: Chemical goggles or shielded safety glasses.
SKIN PROTECTION: Wear protective clothing: long-sleeved shirts and pants, hat, rubber boots with socks. Wear rubber or chemical-resistant gloves.
OSHA PEL 8 hr TWA **ACGIH TLV-TWA**
No listings

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE AND ODOR: Dark green liquid with minimal odor
SOLUBILITY: Appreciable
pH: 2.5-3.0 **BULK DENSITY:** 10.6 lbs / gallon
SPECIFIC GRAVITY (Water = 1): 1.27 **BOILING POINT:** Not established
VAPOR PRESSURE: Not established **EVAPORATION DATE:** Not established
PERCENT VOLATILE (by volume): Not applicable
Note: These physical data are typical values based on material tested but may vary from sample to sample. Typical values should not be construed as a guaranteed analysis of any specific lot or as specification items.

10. STABILITY AND REACTIVITY

STABILITY: Stable
INCOMPATIBILITY: Not known
HAZARDOUS DECOMPOSITION PRODUCTS: SO2 may evolve at high temperatures
HAZARDOUS POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL INFORMATION

Acute Oral LD50(rat): Not established **Acute Dermal LD50(rabbit):** Not established
Eye Irritation (rabbit): Not established **Skin Irritation (rabbit):** Not established

Inhalation LC₅₀(rat): Not established

Skin Sensitization (guinea pig): Not established

Carcinogenic Potential: None listed in OSHA, NTP, IARC, or ACGIH

12. ECOLOGICAL INFORMATION

Drift or runoff may adversely affect non-target plants. Do not apply directly to water. Do not contaminate water when disposing of equipment wash water. Do not apply when weather conditions favor drift from target area.

13. DISPOSAL CONSIDERATIONS

Do not reuse container. Rinse container thoroughly, adding rinsate to mixing tank. Then offer for recycling at an ACRC site (go to <http://www.acrecycle.org/> for locations) or by reconditioning, or puncture and dispose of in a sanitary landfill, or other procedures approved by State and local authorities. Wastes resulting from the use of this product may be disposed of on site or at an approved waste disposal facility. Avoid contaminating water by disposal of equipment wash waters or other product wastes.

14. TRANSPORT INFORMATION

DOT Shipping Description:

NOT REGULATED BY USDOT.

U.S. Surface Freight Classification:

FERTILIZING COMPOUNDS (MANUFACTURED FERTILIZERS), NOI; LIQUID (NMFC 68140, SUB 5; CLASS 50)

15. REGULATORY INFORMATION

NFPA & HMIS Hazard Ratings:

NFPA

1 Health

0 Flammability

0 Instability

0 Least

1 Slight

2 Moderate

3 High

4 Severe

HMIS

1 Health

0 Flammability

0 Reactivity

H PPE

SARA Hazard Notification/Reporting

SARA Title III Hazard Category:

Immediate

Y

Fire

N

Sudden Release of Pressure N

Delayed

N

Reactive

N

Reportable Quantity (RQ) under U.S. CERCLA: Not listed

SARA, Title III, Section 313: Not listed

RCRA Waste Code: Not listed

16. OTHER

Disclaimer and Limitation of Liability: This data sheet was developed from information on the constituent materials identified herein and does not relate to the use of such materials in combination with any other material of process. No warranty is expressed or implied with respect to the completeness or ongoing accuracy of the information contained in this data sheet, and Fisher and Son, Inc. disclaims all liability for reliance on such information. This data sheet is not a guarantee of safety. Users are responsible for ensuring that they have all current information necessary to safely use the product described by this data sheet for their specific purpose.