



# CHEMICAL & FERTILIZER CORPORATION

## Material Safety Data Sheet

### Section 1 - Chemical Product and Company Identification

**Product Name:** Miller Soluble Fertilizers

**Chemical Name:** Soluble salts

**Common Name, Synonym:** Soluble Fertilizer

**Material Uses:** Agricultural Fertilizer

**Manufacturer/Manufactured For:** Miller Chemical & Fertilizer Corp., P. O. Box 333, 120 Radio Road, Hanover, PA 17331  
Phone (717) 632-8921 FAX (717) 646-1104 CHEMTREC (800) 424-9300 24 hours every day

### Section 2 - Composition / Information on Ingredients

Ingredient Name	CAS Number	%
Potassium Nitrate	7757-79-1	
Boric Acid	100043-35-3	
Manganese Sulfate	10034-96-5	
Nuisance particulate	NA	

### Section 3 - Hazards Identification

#### ☆☆☆☆☆ Emergency Overview ☆☆☆☆☆

**Primary Entry Routes:** Eye and skin contact is the most likely exposure. Ingestion is possible. Contact with or inhalation of sprays may cause irritation to eyes, nasal and throat.

**Target Organs:** Eyes, Skin and respiratory tract

**Potential Health Effects:**

**Inhalation:** Spray may cause irritation to nose, throat, mucous membranes, coughing, or difficulty in breathing

**Eye:** May cause eye irritation.

**Skin:** May cause irritation

**Ingestion:** Large doses may cause nausea, vomiting, and stomach pain or cramps.

**Acute Effects:** Irritation

**Chronic Effects:** None known

**Medical Conditions Aggravated by Long-Term Exposure:** None known

### Section 4 - First Aid Measures

**Eye Contact:** Flush gently and thoroughly for 15 minutes with large amounts of clean water, occasionally lifting upper and lower lids. Seek medical attention if irritation persists

**Skin Contact:** Remove contaminated clothing and shoes. Wash skin thoroughly with soap and water. If redness or rash develops and persists, seek medical attention. Wash or clean contaminated clothing and shoes before wearing again

**Ingestion:** Seek medical attention immediately. If immediate help is not available, and person is conscious, give large amounts of water to drink and make person vomit. Do not force an unconscious person to drink or vomit

**Inhalation:** If respiratory symptoms develop, remove person to fresh air immediately. Begin artificial respiration or CPR (cardiopulmonary resuscitation) if required and seek medical attention as appropriate

**Notes to Physician:** None Known

## Section 5 - Fire-Fighting Measures

**Flash Point:** Not Flammable

**Autoignition Temperature:** Not applicable

**LEL/UEL:** Not applicable

**Extinguishing Media:** Water Spray of fog

**Hazardous Decomposition Products:** Oxides of carbon, Sulfur and Nitrogen and Hydrogen. Cyanide may form under fire conditions due to decomposition.

**Fire-Fighting Instructions:** Do not use direct stream of water (water jet). Use supplied air breathing apparatus equipment. Keep unauthorized personnel away. Wear full protective clothing and self-contained breathing apparatus. Stay upwind. Stop spill/release if it can be done without risk. Apply water spray to knock down and absorb fumes and vapors and cool affected containers. Control runoff waters. Ventilate closed spaces before entering. Always stay away from the ends of tanks

**Fire-Fighting Equipment:** Full protective clothing and self-contained breathing apparatus

**Unusual Fire or Explosion Hazards:** Evacuate people downwind from fire. Control runoff water. Combustion product may be toxic or irritating. Certain grades may increase fire intensity.

## Section 6 - Accidental Release Measures

**Spill /Leak Procedures:** ELIMINATE ALL SOURCES OF IGNITION. Sweep up material. Flush area with water, contain and remove cleanup liquid by diking or impounding area to keep product out of sewers and watercourses. As conditions warrant, notify proper authorities, downstream sewer and water treatment operations, and other downstream users about potentially contaminated water

## Section 7 - Handling and Storage

**Handling Precautions:** It is advisable to wash promptly if skin becomes contaminated; before eating, drinking, using tobacco, or chewing gum; before using toilet facilities; and at the end of the work shift before leaving the worksite

**Storage Requirements:** Store at temperatures between 41°F and 104°F (5°C and 40°C), in well-ventilated areas away from heat or flame.

**Regulatory Requirements:** None Known

## Section 8 - Exposure Controls / Personal Protection

**Engineering Controls:**

**Ventilation:** None required under normal conditions

**Administrative Controls:**

**Respiratory Protection:** A NIOSA/MSHA approved respirator should be worn when dusting/misting occurs

**Protective Clothing/Equipment:** Chemical protective goggles should be used where splashing may occur. Wear rubber or neoprene gloves where splashing may occur. If irritation occurs, impervious clothing and gloves should be worn.

**Safety Stations:** Not Known

**Contaminated Equipment:** Not Known

**Comments:** None

## Section 9 - Physical and Chemical Properties

**Physical State:** Solid

**Appearance and Odor:** White, lime green and or blue  
Crystalline granules, slight to moderate odor

**Odor Threshold:** Not Known

**Vapor Pressure:** Not known

**Vapor Density (Air=1):** Not known

**Percent Volatile (by volume):** Negligible

**Evaporation Rate:** Negligible

**Formula Weight:** Not Applicable

**Bulk Density:** Varies with different grades

**Specific Gravity (H<sub>2</sub>O=1, at 4 °C):** Not applicable

**pH (1% solution):** 4 to 7 @ 20c

**Solubility in water:** Soluble

## Section 10 - Stability and Reactivity

**Stability:** Stable

**Hazardous Polymerization:** None Known

**Chemical Incompatibilities:** None known

**Conditions to Avoid:** Excessive heat, sources of ignition, wet and humid conditions

**Hazardous Decomposition Products:** At high temperatures product may release oxides of carbon

## Section 11- Toxicological Information

### Toxicity Data:\*

**Eye Effects:** May cause irritation

**Acute Dermal Effects:** May cause irritation

**Acute Oral Effects:** not known

**Acute Inhalation Effects:** May cause irritation

**Chronic Effects:** Not known

**Carcinogenicity:** None known for this product

**Mutagenicity:** None known for this product

**Teratogenicity:** None known for this product

\* See NIOSH, RTECS on listed ingredients for additional toxicity data.

## Section 12 - Ecological Information

**Ecotoxicity:** This product is a soluble fertilizer. Large spills could possibly damage vegetation. Contamination of waterways could possibly cause fish kills. Prevent spread and runoff into drains, storm sewers, and ditches that lead to waterways.

**Aquatic Toxicity:** Not Known

**Environmental Fate:** Not known

## Section 13 - Disposal Considerations

**Disposal:** If uncontaminated, recover and reuse as product. If contaminated with other materials, the nature and extent of contamination may require use of specialized disposal methods. Consult local, county, state, or federal regulatory agencies for acceptable disposal procedures and disposal locations

**Disposal Regulatory Requirements:** Consult local, county, state, or federal regulatory agencies for acceptable disposal procedures and disposal locations

**Container Cleaning and Disposal:** Consult local, county, state, or federal regulatory agencies for acceptable disposal procedures and disposal locations

## Section 14 - Transportation Information

### U.S. DEPARTMENT OF TRANSPORTATION

PROPER SHIPPING NAME:

PACKING GROUP:

HAZARD CLASS:

LABEL/PLACARD REQUIRED:

UN/NA No.:

### WATER TRANSPORTATION

PROPER SHIPPING NAME:

PACKING GROUP:

HAZARD CLASS:

LABEL/PLACARD REQUIRED:

UN/NA No.:

### AIR TRANSPORTATION

PROPER SHIPPING NAME:

PACKING GROUP:

HAZARD CLASS:

LABEL/PLACARD REQUIRED:

UN/NA No.:

OTHER AGENCIES:

### SECTION 14 NOTES:

This product is not considered a hazard in transit.

## Section 15 - Regulatory Information

**EPA Regulations:**

**Reportable Quantity –CERCLA: Not applicable**

**SARA Title III (EPCRA):**

Manganese as EDTA Chelated Salt	CAS # 15375-84-5	(Consult Product Label)
Copper as EDTA Chelated Salt	CAS # 14025-15-1	(Consult Product Label)
Zinc as EDTA Chelated Salt	CAS # 14025-21-9	(Consult Product Label)
Manganese as Manganese Sulfate	CAS # 10034-96-5	(Consult Product Label)

**RCRA Waste Code: Not applicable**

**State Regulations:**

**CA Proposition 65: Not applicable**

EPA National Response Center (800) 424-8802

## Section 16 - Other Information

**Preparation Date: 2-26-09**

**Prepared By:** For Miller Chemical and Fertilizer Corporation by Justin Nace

**Revision Date:**

**Revision Notes:**

**NOTICE TO READER:** THE INFORMATION CONTAINED IN THIS MATERIAL SAFETY DATA SHEET (“MSDS”) RELATES ONLY TO THE SPECIFIC PRODUCT(S) DESIGNATED HEREIN (THE “PRODUCT”). THE INFORMATION AND RECOMMENDATIONS CONTAINED HEREIN ARE BASED UPON DATA BELIEVED TO BE CURRENT AND CORRECT AS OF THE DATE OF THIS MSDS, AND OBTAINED FROM SOURCES THAT ARE BELIEVED TO BE RELIABLE. HOWEVER, THIS INFORMATION IS FURNISHED WITHOUT WARRANTY, REPRESENTATIONS OR LICENSE OF ANY KIND, EXPRESS OR IMPLIED, WITH RESPECT TO ACCURACY, CORRECTNESS OR COMPLETENESS, AND NEITHER (MILLER CHEMICAL AND FERTILIZER CORPORATION.) NOR ITS MARKETING AFFILIATES (EACH, A “SELLER”) ASSUME ANY LEGAL RESPONSIBILITY FOR USE OR RELIANCE UPON SAME.