# MATERIAL SAFETY DATA SHEET NORTRACE® IRON 20% REG. 2001035B

***FOR CHEMICAL EMERGENCY, SPILL, LEAK, FIRE, EXPOSURE OR ACCIDENT, CALL DAY OR NIGHT 1-800-561-8273 or CHEMTREC 1-800-424-9300***

## 1. CHEMICAL PRODUCT AND COMPANY INFORMATION

**DISTRIBUTED BY:**

UNITED AGRI PRODUCTS CANADA, INC.
789 Donnybrook Drive • Dorchester, Ontario N0L 1G5

**24-Hour Emergency Phone:** 1-800-561-8273
**Medical Emergencies (Prosar):** 1-800-301-7976
**Additional Emergency Phone (Canutec):** 1-613-996-6666 (Collect)

**CHEMICAL IDENTITY:** Iron Citrate
**PRODUCT USE:** Soluble Micronutrient Fertilizer
**REG. NO.:** 2001035B – Fertilizers Act
**MSDS Number:** 2001035B-08-UAP **MSDS Revisions:** Sections 1, 2 **Date of Issue:** 07/06/10 **Supersedes:** 01/14/08

## 2. HAZARDS IDENTIFICATION SUMMARY

**KEEP OUT OF REACH OF CHILDREN – CAUTION -** Harmful if swallowed, inhaled or absorbed through skin. May cause eye and skin irritation. Avoid contact with eyes, skin and clothing. Avoid breathing dusts and mists. Use with adequate ventilation. Eye protection and gloves are suggested when handling undiluted product. Wash thoroughly after handling. Use caution when opening. This water soluble micronutrient fertilizer is derived from Ferrous Sulfate and Citric Acid.

This product is a light tan-colored granular powder with metallic odor. Primary routes of entry are eye contact and skin contact.

## 3. COMPOSITION, INFORMATION ON INGREDIENTS

| Chemical Ingredients: | Percentage by Weight: | CAS No. | TLV (Units) |
|---|---|---|---|
| Iron (Fe), from Ferrous Sulfate | 20.00 | 7720-78-7 | not listed |
| Other ingredients, including | 80.00 | | |
| Citric Acid | | 77-92-9 | not listed |

## 4. FIRST AID MEASURES

**If on skin:** Remove all contaminated clothing. Wash skin and hair thoroughly with soap and water. Wash clothing before reuse. If irritation persists, get medical attention.
**If in eyes:** Flush with running water for at least 15 minutes while holding eyelids open to help flush out material. Get medical attention.
**If swallowed:** Induce vomiting immediately as directed by medical personnel. Never induce vomiting or give anything by mouth to an unconscious person. Call physician immediately or contact poison control center.
**If inhaled:** Remove to fresh air. If breathing is difficult, administer oxygen; if breathing stops, administer artificial respiration. Get medical attention immediately.

**FOR A MEDICAL EMERGENCY INVOLVING THIS PRODUCT CALL: 1-800-301-7976.** Have the product label or container with you when calling a poison control centre or doctor, or going for treatment.
**NOTE TO PHYSICIAN:** No known antidote, treat symptomatically.

## 5. FIRE FIGHTING MEASURES

**FLASH POINT (°F/Test Method):** Does not flash.
**FLAMMABLE LIMITS (LFL & UFL):** Not established
**EXTINGUISHING MEDIA:** Considered non-combustible, use medium appropriate to surrounding fire. Dry chemical, carbon dioxide ($CO_2$), foam, water spray or fog.
**HAZARDOUS COMBUSTION PRODUCTS:** May include but are not limited to oxides of sulfur.
**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:** Dusts or vapors can travel to a sources of ignition and flash back.

## 6. ACCIDENTAL RELEASE MEASURES

**STEPS TO BE TAKEN IF MATERIAL IS RELEASED OR SPILLED:**
Avoid breathing dusts. Sweep up dry spills immediately and transfer to suitable containers for possible land application according to label use or for disposal. Check local and provincial regulations for proper disposal.
**CAUTION:** Keep spills and cleaning runoff out of municipal sewers and open bodies of water.

## 7. HANDLING AND STORAGE

**HANDLING:** Mix product in HDPE, fiberglass or stainless steel containers only. Wash thoroughly after handling. Avoid breathing dust. Protect eyes with goggles or a face shield when handling diluted product. Wash hands before eating, drinking, chewing gum, using tobacco or using the toilet. Remove clothing immediately if product gets inside. Then wash thoroughly and put on clean clothing. Remove PPE immediately after handling this product. Wash the outside of gloves before removing. As soon as possible, wash thoroughly and change into clean clothing.

**STORAGE:** Carefully fold and secure open bags and store in a cool dry place away from children, feed and food products, pesticides, and seed. Do not contaminate water, food, or feed by storage or disposal.

## 8. EXPOSURE CONTROLS / PERSONAL PROTECTION

**ENGINEERING CONTROLS:** Not normally required.
**RESPIRATORY PROTECTION:** Not normally required, if vapors or dusts exceed acceptable levels, wear a MSHA/NIOSH approved pesticide respirator with dust/mist prefilter.
**EYE PROTECTION:** Chemical goggles or shielded safety glasses.
**SKIN PROTECTION:** Wear protective clothing: long-sleeved shirts and pants, shoes with socks. Wear rubber or chemical-resistant gloves.

| | OSHA PEL 8 hr TWA | ACGIH TLV-TWA |
|---|---|---|
| Nuisance Particulates | 15 mg/m$^3$ (Total Dust) | Not listed |

## 9. PHYSICAL AND CHEMICAL PROPERTIES

**APPEARANCE AND ODOUR:** Light tan-colored granular powder with metallic odor
**SOLUBILITY:** Complete
**SPECIFIC GRAVITY (Water = 1):** 0.83 g/ml
**BULK DENSITY:** 830 kg/m$^3$
**pH:** 2 (1% solution)
**VAPOUR PRESSURE:** Not established
**BOILING POINT:** Not applicable
**PERCENT VOLATILE (by volume):** Not established
**EVAPORATION RATE: (Butyl Acetate = 1):** Not established

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
**CONDITIONS TO AVOID:** Excessive heat and moisture.
**INCOMPATIBILITY:** Strong oxidizing agents.
**HAZARDOUS DECOMPOSITION PRODUCTS:** Oxides of sulfur may be released in a fire situation.
**HAZARDOUS POLYMERIZATION:** Will not occur.

## 11. TOXICOLOGICAL INFORMATION

**Acute Oral $LD_{50}$ (male rat):** > 5000 mg/kg
**Acute Dermal $LD_{50}$ (rabbit):** > 5000 mg/kg
**Eye Irritation (rabbit):** May cause irritation
**Skin Irritation (rabbit):** May cause irritation
**Inhalation $LC_{50}$ (female rat):** Not established.
**Skin Sensitization (Guinea Pig):** Not established
**Carcinogenic Potential:** Not listed in OSHA, NTP, IARC, or ACGIH.
**Target Organs:** None

## 12. ECOLOGICAL INFORMATION

Do not apply directly to water, or to areas where surface water is present or to intertidal areas below the mean high water mark. Do not contaminate water by cleaning of equipment or disposal of wastes.

## 13. DISPOSAL CONSIDERATIONS

Do not reuse containers for any purpose. Completely empty bag by shaking and tapping sides and bottom to loosen clinging particles. Empty residue into application equipment. For disposal, empty container may be returned to the point of purchase (distributor/dealer). Follow provincial instructions for any required additional cleaning of container. Make the empty container unsuitable for further use. Dispose of the container in accordance with provincial requirements. For information on disposal of unused, unwanted product, contact the manufacturer or the provincial regulatory agency. Do not contaminate water, food, or feed by storage or disposal.

## 14. TRANSPORT INFORMATION

**DOT/TDG Shipping Description:** NOT REGULATED
**U.S. Surface Freight Classification:** FERTILIZNG COMPOUNDS (MANUFACTURED FERTILIZERS), NOI, SOLID (NMFC 68140, SUB 5; CLASS 50)
**IMDG Shipping Description:** NOT REGULATED

**Consult appropriate ICAO/IATA regulations for shipment requirements in the Air shipping mode.**

## 15. REGULATORY INFORMATION

**NFPA & HMIS Hazard Ratings**:

| NFPA | | | | HMIS | |
|---|---|---|---|---|---|
| 1 | Health | 0 | Least | 1 | Health |
| 0 | Flammability | 1 | Slight | 0 | Flammability |
| 0 | Instability | 2 | Moderate | 0 | Reactivity |
| | | 3 | High | H | PPE |
| | | 4 | Severe | | |

**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:** Ferrous Sulfate (CAS: 7720-78-7) 1000 lbs.
**SARA, Title III, Section 313:** Not listed
**RCRA Waste Code:** Not listed
**CA Proposition 65:** Not listed

## 16. OTHER INFORMATION

**MSDS STATUS:** Sections 1 and 2 revised.

**PREPARED BY:** Registrations and Regulatory Affairs **REVIEWED BY:** Environmental/ Regulatory Services

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