



**THE ANDERSONS
MATERIAL SAFETY DATA SHEET**

PRODUCT CODE: AGC231FE5.1

DATE PREPARED: 08/05/02

SECTION I: PRODUCT IDENTITY

PRODUCT NAME: The Andersons Golf Products Turf Fertilizer 23-2-10

MFR INFO: The Andersons Lawn Products
PO Box 119
Maumee, Ohio 43537

FOR EMERGENCY: (800) 757-8951
FOR INFORMATION: (419) 891-2957

CURRENT AS OF: 3/17/05

SECTION II: HAZARDOUS INGREDIENTS / IDENTITY INFORMATION

HAZARDOUS COMPONENT	OSHA PEL	ACGIH TLV
Sulfate of potash (CAS # 7778-80-5)	15 mg/m ³ (total) 5 mg/m ³ (respirable)	10 mg/m ³ (inhalable) 3 mg/m ³ (respirable)
Inorganic iron mix (CAS # Not listed)	15 mg/m ³ (total) 5 mg/m ³ (respirable)	10 mg/m ³ (inhalable) 3 mg/m ³ (respirable)
Polymer coated sulfur coated urea (CAS # Not listed)		
Limestone (CAS # 1317-65-3)	15 mg/m ³ (total) 5 mg/m ³ (respirable)	10 mg/m ³ (inhalable) 3 mg/m ³ (respirable)
Diammonium phosphate (CAS # 7783-28-0)	15 mg/m ³ (total) 5 mg/m ³ (respirable)	10 mg/m ³ (inhalable) 3 mg/m ³ (respirable)
Urea (CAS # 57-13-6)	15 mg/m ³ (total) 5 mg/m ³ (respirable)	10 mg/m ³ (inhalable) 3 mg/m ³ (respirable)

SECTION III: PHYSICAL DATA

BOILING POINT: NA EVAPORATION RATE: NA pH: NA

VAPOR DENSITY: NA VAPOR PRESSURE: NA

MELTING POINT: NA SPECIFIC GRAVITY: NA

SOLUBILITY (IN WATER): Partially soluble

APPEARANCE AND ODOR: Multi-colored granular mix, with slight ammonia / sulfur odor

SECTION IV: FIRE AND EXPLOSION HAZARD DATA

FLASH POINT: Not flammable FLAMMABLE LIMITS: NA

EXTINGUISHING MEDIA: Use media suitable for surrounding fire

SPECIAL FIRE FIGHTING PROCEDURES:

Wear full protective clothing and positive-pressure self-contained breathing apparatus

UNUSUAL FIRE AND EXPLOSION HAZARDS:

Decomposition products may be toxic; sulfur will burn when separated from molten urea

SECTION V: REACTIVITY DATA

CONDITIONS TO AVOID: Excessive heat (over 200°F)

INCOMPATIBILITY: Strong oxidizers, acids, caustics, hypochlorites

HAZARDOUS DECOMPOSITION PRODUCTS: CO_x, NH₃, PO_x, SO_x, NO_x, cyanuric acid, HCN

Product is stable and hazardous polymerization will not occur. May release ammonia on standing.

SECTION VI: PERSONAL PROTECTION INFORMATION

RESPIRATORY PROTECTION: NIOSH approved particulate respirator, if required

EYE PROTECTION: Safety glasses with sideshields, goggles, or faceshield are recommended

SKIN PROTECTION: Long sleeves, rubber gloves recommended

VENTILATION: Local exhaust ventilation recommended

SECTION VII: HEALTH HAZARD DATA

HEALTH HAZARDS: May be irritating to the nose, throat, and respiratory tract, and may cause sore throat, coughing, and shortness of breath. Skin irritation may result. Skin sensitization is possible. May also be irritating to the eyes, causing redness and watering. Prolonged eye exposure may cause conjunctivitis and corneal damage. Ingestion may result in sore throat, abdominal pain, nausea, and diarrhea. Ingestion of large amounts of sulfur may lead to hydrogen sulfide poisoning due to bacterial conversion of sulfur in the colon.

MEDICAL CONDITIONS AGGRAVATED BY EXPOSURE: Pre-existing eye, skin, or respiratory conditions

FIRST AID PROCEDURES:

IF SWALLOWED: If victim is alert and not convulsing, give one glass of water to dilute material, but **DO NOT** induce vomiting. Seek immediate medical attention.

IF INHALED: Move victim to fresh air. Seek medical attention if irritation persists.

IF IN THE EYES: Immediately flush with water for at least 20 minutes. Seek medical attention if irritation persists.

IF ON SKIN: Wash affected areas with soap and water. Seek medical attention if irritation persists. Wash contaminated clothing before re-use.

CARCINOGENICITY: None of the ingredients are known / listed carcinogens, however, product may contain trace amounts of inorganic fluorides and crystalline silica. Fluorides have been suggested as a reproductive hazard and a carcinogen. Crystalline silica is listed by IARC as a potential human carcinogen.

SECTION VIII: PRECAUTIONS FOR SAFE HANDLING AND USE

SPILL/RELEASE PROCEDURES: Collect spilled product and store to re-use. Contaminated product and/or environmental media should be recovered and disposed of properly.

WASTE DISPOSAL METHOD: Dispose of in accordance with all federal, state, and local regulations. Reuse recovered product where possible.

HANDLING/STORING PRECAUTIONS: Store in a cool, dry, well ventilated area. Do not store above 120° F.

MSDS ID NO: 253

PREPARED BY: SS

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