



Material Safety Data Sheet

Section 1 – Material Identification

Product Name:

Grow

Product Use:

Agricultural Fertilizer

Manufacturer:

Perfect G Inc.

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Minden NV 89423

Phone:

(888) 287-3816

Section 2 – Hazards Identification

Potential Acute Health Effects:

Hazardous in case of skin contact (irritant), of eye contact (irritant), of ingestion, of inhalation. Slightly hazardous in case of skin contact (permeator). Prolonged exposure may result in skin burns and ulcerations. Over-exposure by inhalation may cause respiratory irritation.

Potential Chronic Health Effects:

CARCINOGENIC EFFECTS: Not available. MUTAGENIC EFFECTS: Not available.

TERATOGENIC EFFECTS: Not available. DEVELOPMENTAL TOXICITY: Not available. The substance is toxic to lungs, mucous membranes. Repeated or prolonged exposure to the substance can produce target organs damage.

Section 3 – Information on Ingredients

Composition

Name	CAS #	RAT ORAL LD50 mg/kg
Calcium Nitrate	13477-34-4	3900
Ammonium Sulfate	7783-20-2	2840
Magnesium Nitrate	13446-18-9	5440
Potassium Nitrate	7757-79-1	3750

Trade secret claim: Exact percentage composition is a trade secret.

Section 4 – First Aid Measures

Eye Contact:

Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keeping eyelids open. Cold water may be used. Do not use an eye ointment. Seek medical attention.

Skin Contact:

After contact with skin, wash immediately with plenty of water. Gently and thoroughly wash the contaminated skin with running water and non-abrasive soap. Be particularly careful to clean folds, crevices, creases and groin. Cold water may be used. Cover the irritated skin with an emollient. If irritation persists, seek medical attention.

Serious Skin Contact:

Wash with a disinfectant soap and cover the contaminated skin with an anti-bacterial cream. Seek medical attention. Inhalation: Allow the victim to rest in a well ventilated area. Seek immediate medical attention.

Serious Inhalation:

Evacuate the victim to a safe area as soon as possible. Loosen tight clothing such as a collar, tie, belt or waistband. If breathing is difficult, administer oxygen. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek medical attention.

Ingestion: Do not induce vomiting.

Loosen tight clothing such as a collar, tie, belt or waistband. If the victim is not breathing, perform mouth-to-mouth resuscitation. Seek immediate medical attention.

Serious Ingestion: Not available

Section 5 – Fire and Explosion Data

Flammability of the Product: Non-flammable. However may cause fires when in contact with flammables.

Auto-Ignition Temperature: Not applicable.

Flash Points: Not applicable.

Flammable Limits: Not applicable.

Products of Combustion: Poisonous gases are produced in a fire.

Fire Hazards in Presence of Various Substances: Not applicable.

Explosion Hazards in Presence of Various Substances: Not available.

Risks of explosion of the product in presence of static discharge: Not available.

Fire Fighting Media and Instructions: Flood with water. Do not use CO₂ or halogenated extinguishing agents.

Special Remarks on Fire Hazards: Can greatly intensify the burning of all combustible materials.

Special Remarks on Explosion Hazards: Not available.

Section 6 – Accidental Release Measures

Small Spill:

Use appropriate tools to put the spilled solid in a convenient waste disposal container.

Large Spill:

Oxidizing material. Stop leak if without risk. Avoid contact with a combustible material (wood, paper, oil, clothing...). Keep substance damp using water spray. Do not touch spilled material. Prevent entry into sewers, basements or confined areas; dike if needed. Call for assistance on disposal.

Section 7 – Handling and Storage

Precautions:

Keep away from heat. Keep away from sources of ignition. Keep away from combustible material..Do not ingest. Do not breathe dust. Wear suitable protective clothing. In case of insufficient ventilation, wear suitable respiratory equipment. If ingested, seek medical advice immediately and show the container or the label. Avoid contact with skin and eyes. Keep away from incompatibles such as reducing agents, combustible materials, organic materials, metals.

Storage:

Hygroscopic. Keep container tightly closed. Keep container in a cool, well-ventilated area. Separate from acids, alkalis, reducing agents and combustibles. See NFPA 43A, Code for the Storage of Liquid and Solid Oxidizers.

Section 8 – Exposure Controls/Personal Protection

Engineering Controls:

Use process enclosures, local exhaust ventilation, or other engineering controls to keep airborne levels below recommended exposure limits. If user operations generate dust, fume or mist, use ventilation to keep exposure to airborne contaminants below the exposure limit.

Personal Protection:

Splash goggles. Lab coat. Dust respirator. Be sure to use an approved/certified respirator or equivalent. Gloves.

Personal Protection in Case of a Large Spill:

Splash goggles. Full suit. Dust respirator. Boots. Gloves. A self contained breathing apparatus should be used to avoid inhalation of the product. Suggested protective clothing might not be sufficient; consult a specialist BEFORE handling this product.

Exposure Limits: Not available.

Section 9 – Physical and Chemical Properties

Physical state and appearance: Solid, powder.

Odor: Odorless.

Color: White.

pH (1g/L in distilled water): Not available.

Boiling Point: Not available

Melting Point: Not available

Specific Gravity: Not available

Volatility: Not available.

Solubility: Easily soluble in hot water. Soluble in cold water.

Section 10 – Stability and Reactivity Data

Stability: The product is stable.

Instability Temperature: Not available.

Conditions of Instability: Incompatible materials, dust generation

Incompatibility with various substances: Reactive with reducing agents, combustible materials, organic materials, metals.

Corrosivity: Non-corrosive in presence of glass.

Special Remarks on Reactivity: Hygroscopic; keep container tightly closed. Nitrate mixtures can react vigorously when heated with sulfides of the alkaline earth group including barium sulfide and calcium sulfide. Also incompatible with boron, and finely powdered metals, chromium nitride, aluminum, titanium, antimony, germanium, zinc, zirconium, calcium disilicide, metal sulfides, carbon, sulfur, phosphorus, phosphides, sodium phosphinate, sodium thiosulfate, citric acid, tin chloride, sodium acetate, thorium carbide.

Special Remarks on Corrosivity: Not available.

Polymerization: Will not occur.

Section 11 – Toxicological Information

Routes of Entry: Inhalation. Ingestion.

Toxicity to Animals: Not available. See section 2 for toxicological information for individual ingredients.

Chronic Effects on Humans: May cause damage to the following organs: blood, kidneys, central nervous system (CNS).

Other Toxic Effects on Humans: Hazardous in case of skin contact (irritant), of ingestion, of inhalation (lung irritant).

Special Remarks on Toxicity to Animals: Not available.

Special Remarks on Chronic Effects on Humans: May cause adverse reproductive effects based on animal test data. May affect genetic material (mutagenic)

Special Remarks on other Toxic Effects on Humans: Acute Potential Health Effects: Skin: Causes skin irritation. Eyes: Causes eye irritation Inhalation: Breathing nitrates can irritate the nose and throat causing sneezing and coughing. High levels can interfere with the ability of the blood to carry oxygen causing headache, dizziness and a blue color to the skin and lips (methemoglobinemia), and other symptoms of methemoglobinemia (see other symptoms under ingestion). Higher levels can cause trouble breathing, circulatory collapse and even death. Ingestion: Ingestion of large quantities may cause violent gastroenteritis with nausea, vomiting, severe abdominal pain. It may also cause colic and diarrhea. Acute toxicity of nitrate occurs as a result of reduction to nitrite. The nitrite acts in the blood to oxidize hemoglobin to methemoglobin which does not perform as an oxygen carrier to tissues causing Methemoglobinemia. Symptoms may include vertigo, muscular weakness, syncope, irregular pulse, convulsions, p. 5 anoxia, coma, fall in blood pressure, roaring sound in the ears, a persistent throbbing headache, generalized tingling sensation, heart palpitations, visual disturbances caused by increased intraocular tension and intracranial pressure, flushed and perspiring skin, which is later cold and cyanotic. Circulatory collapse and death may occur. Chronic Potential Health Effects: Ingestion and Inhalation: Repeated or prolonged exposure to small amounts may affect the blood, respiration and

kidneys and produce anemia, Methenoglobinemia with attendant cyanosis and anoxia, hyperpnea and later dyspnea, and nephritis.

Section 12 – Stability and Reactivity Data

Ecotoxicity: Not available.

BOD5 and COD: Not available.

Products of Biodegradation: Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation: The products of degradation are less toxic than the product itself.

Special Remarks on the Products of Biodegradation: Not available

Section 13 – Disposal Considerations

Waste Disposal: Waste must be disposed of in accordance with federal, state and local environmental control regulations.

Section 14 – Transport Information

Hazard Class: 9

Identification: : Ammonium Nitrate Fertilizer : UN2071 PG: III

Special Provisions for Transport: Not available.

Section 15 – Regulatory Information

EPA regulations: Not listed.

Section 16 – Other information

Information on this data sheet is for use of this product as intended by the manufacturer. Users should take all precautions necessary while working with this product. Although this information is provided in good faith, Perfect Grower makes no claims about the accuracy or comprehensiveness of the