



Safety Data Sheet

Issue Date: 11/24/15

Revision Date: N/a

Version: 1

1. Identification of the Substance/Preparation and of the Company/Undertaking

Product Identifier

Product Form: Mixture

Product Name: Fertilizer with Lasar 250

Other means of identification

EPA Pesticide Registration Number: 62719-485-48234

Recommended use of the chemical and restrictions on use

Recommended use: Herbicide. For professional use only.

Details of the supplier of the safety data sheet

Company

Regal Chemical Company
600 Branch Dr.,
Alpharetta, GA 30004

Emergency telephone number

Company Telephone: (770) 475-4837

Emergency Telephone: Chemtrec 1-800-262-8200

2. Hazardous Identification

Classification of the Mixture

Classification (GHS-US):

Skin Irrit. 2 H315

Eye Irrit. 2A H319

Aquatic Acute 3 H402

Full text of H-phrases: see section 16

Label Elements

GHS-US Labeling

Hazard Pictograms (GHS-US):



GH507

Signal Word (GHS-US): Warning

Hazard Statements:

H315 – Causes skin irritation.

H319 – Causes serious eye irritation.

H402 – Harmful to aquatic life.



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Precautionary Statements (GHS – US)

P264 - Wash hands, forearms, and other exposed areas thoroughly after handling.

P273 - Avoid release to the environment.

P280 - Wear protective gloves, protective clothing, and eye protection.

P302+P352 - If on skin: Wash with plenty of water.

P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes.

Remove contact lenses, if present and easy to do. Continue rinsing.

P321 - Specific treatment (see section 4 on this SDS).

P332+P313 - If skin irritation occurs: Get medical advice/attention.

P337+P313 - If eye irritation persists: Get medical advice/attention.

P362 - Take off contaminated clothing and wash it before reuse.

P501 - Dispose of contents/container in accordance with local, regional, national, and international regulations.

Other Hazards: No additional information available.

Unknown Acute Toxicity (GHS-US): No data available.

3. Composition/Information on Ingredients

Substance: Not applicable.

Mixture:

Name	Product Identifier	%	Classification (GHS-US)
Nitrogen	(CAS No) 7727-37-9	<=30	Simple Asphy, H380 Compressed gas, H280
Potassium	(CAS No) 7440-09-7	<=30	Comb. Dust, H232 Water-react. 1, H260 Skin Corr. 1B, H314 Eye Dam. 1, H318
Phosphate Ion	(CAS No) 14265-44-2	<=30	Not classified
Limestone	(CAS No) 1317-65-3	<=8	Not classified
Silica, amorphous	(CAS No) 7631-86-9	<=1.75	Not classified
Dithiopyr	(CAS No) 97886-45-8	0.07-0.22	Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Toluene	(CAS No) 108-88-3	0.0003-0.001	Flam. Liq. 2, H225 Skin Irrit. 2, H315 Repr. 2, H361 STOT SE 3, H336 STOT RE 2, H373 Asp. Tox. 1, H304 Aquatic Acute 2, H401 Aquatic Chronic 3, H412



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4. First Aid Measures

First aid measures:

General First-Aid Measures: First Aid responders should pay attention to self-protection and use the recommended protective clothing (chemical resistant gloves, splash protection). If potential for exposure exists refer to Section 8 for specific personal protective equipment.

Eye Contact: Rinse cautiously with water for at least 15 minutes. Remove contact lenses, if present and easy to do so. Continue rinsing. Obtain medical attention if irritation persists.

Skin Contact: Remove contaminated clothing. Gently wash with plenty of soap and water followed by rinsing with water for at least fifteen minutes. Call a POISON CENTER or doctor/physician if you feel unwell. Wash contaminated clothing before reuse.

Inhalation: If inhaled, remove to fresh air and keep at rest in a position comfortable for breathing. If you feel unwell, seek medical advice.

Ingestion: Rinse mouth. If swallowed, do not induce vomiting: seek medical advice immediately and show this container or label. Call a POISON CENTER/doctor/physician if you feel unwell.

Most Important systems and effects, both acute and delayed:

Symptoms/Injuries: Causes serious eye irritation. Causes skin irritation.

Symptoms/Injuries After Inhalation: Repeated or prolonged exposure to respirable (airborne) crystalline silica dust will cause lung damage in the form of silicosis. Symptoms will include progressively more difficult breathing, cough, fever, and weight loss.

Symptoms/Injuries After Skin Contact: Causes skin irritation. Symptoms may include: Redness, pain, swelling, itching, burning, tearing, and blurred vision.

Symptoms/Injuries After Ingestion: Ingestion is likely to be harmful or have adverse effects.

Chronic Symptoms: Pre-existing lung diseases such as emphysema or asthma may be aggravated by exposure to dusts. Pulmonary function may be reduced by inhalation of respirable crystalline silica. Also lung scarring produced by such inhalation may lead to a progressive massive fibrosis of the lung which may aggravate other pulmonary conditions and disease and which increases susceptibility to pulmonary tuberculosis. Progressive massive fibrosis may be accompanied by right heart enlargement, heart failure, and pulmonary failure. Smoking aggravates the effects of exposure. May causes damage to organs through prolonged or repeated exposure.

Indication of any immediate medical attention and special treatment needed:

If medical advice is needed, have product container or label at hand.



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5. Fire-Fighting Measures

Suitable extinguishing media: Use extinguishing media appropriate for surrounding fire.

Unsuitable extinguishing media: Do not use water jet. Use a heavy stream of water may spread fire.

Specific hazards arising from the chemical:

Fire Hazard: Not considered flammable but will burn at high temperatures.

Explosion Hazard: Product itself is not explosive but if dust is generated, dust clouds suspended in air can be explosive.

Reactivity: Hazardous reactions will not occur under normal conditions.

Advice for firefighters

Precautionary Measures Fire: Do not breathe fumes from fires or vapors from decomposition. Under fire conditions, the product will give off toxic vapors of ammonia and formaldehyde.

Firefighting Instructions: Exercise caution when fighting any chemical fire. Use water spray or fog for cooling exposed containers. In case of major fire and large quantities: Evacuate area. Fight fire remotely due to the risk of explosion.

Protection During Firefighting: Firefighters must use full bunker gear including NIOSH-approved positive-pressure self-contained breathing apparatus to protect against potential hazardous combustion and decomposition products.

Other Information: Do not allow run-off from fire fighting to enter drains or water courses.

6. Accidental Release Measures

Personal precautions, protective equipment and emergency procedures

General Measures: Handle in accordance with good industrial hygiene and safety practice. Do not allow product to spread into the environment. Do not breathe dust. Do not get in eyes, on skin, or on clothing.

For non-emergency personnel:

Protective Equipment: Wear suitable protective clothing, gloves and eye/face protection. Use appropriate personal protection equipment (PPE).

Emergency Procedure: Ventilate area. Evacuate unnecessary personnel.

Environmental Precautions:

Environmental Precautions: Prevent entry to sewers and public waters. Contact competent authorities after a spill.



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Methods and material for containment and cleaning up

Methods for containment: Contain and collect as any solid.

Methods for cleaning up: Clean up spills immediately and dispose of waste safely. Take up mechanically (sweeping, shoveling) and collect in suitable container for disposal. Utilize a dust suppressant when removing mechanically.

Reference to Other sections: See Section 8, Exposure Controls and Personal Protection. See Section 13, Disposal Considerations.

7. Handling and Storage

Precautions for safe handling:

Additional Hazards When Processed: Accumulation and dispersion of dust with an ignition source can cause a combustible dust explosion. Keep dust levels to a minimum and follow applicable regulations.

Precautions for Safe Handling: Wear recommended personal protective equipment. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Avoid breathing dust. Use only outdoors or in a well-ventilated area.

Hygiene Measures:

Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas with mild soap and water before eating, drinking, or smoking and again when leaving work. Wash hands and forearms thoroughly after handling. Contaminated work clothing should not be allowed out of the workplace. Wash contaminated clothing before reuse. Do not eat, drink or smoke when using this product.

Conditions for safe storage, including any incompatibilities:

Technical Measures: Any proposed use of this product in elevated-temperature processes should be thoroughly evaluated to assure that safe operating conditions are established and maintained.

Storage Conditions: Store tightly closed in a dry, cool and well-ventilated place. Protect from moisture. Keep container closed when not in use.

Incompatible Products: Alkalies. Heat sources. Reducing agents. Oxidizers.

Prohibitions On Mixed Storage: Store away from: Ammonium nitrate. Refer to Section 10 on Incompatible Materials.

Specific End Use: Herbicide for professional use only.



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8. Exposure Controls/Personal Protection

Control Parameters

For substances listed in section 3 that are not listed here, there are no established exposure limits from the manufacturer, supplier, importer, or the appropriate advisory agency including: ACGIH (TLV), NIOSH (REL), or OSHA (PEL).

Nitrogen (7727-37-9)		
USA ACGIH	ACGIH chemical category	Simple asphyxiant See Appendix F: Minimal Oxygen Content
Limestone (1317-65-3)		
USA NIOSH	NIOSH Rel (TWA) (mg/m ³)	10 mg/m ³ (total dust) 5 mg/m ³ (respirable dust)
USA OSHA	OSHA PEL (TWA) (mg/m ³)	15 mg/m ³ (total dust) 5 mg/m ³ (respirable fraction)
Silica, amorphous (7631-86-9)		
USA NIOSH	NIOSH Rel (TWA) (mg/m ³)	6 mg/m ³
USA IDLH	US IDLH (mg/m ³)	3000 mg/m ³
USA OSHA	OSHA PEL (TWA) (mg/m ³)	6 mg/m ³
USA OSHA	OSHA PEL (TWA) (ppm)	20 mppcf (80mg/m ³ /%SiO ₂)
Toluene (108-88-33)		
USA ACGIH	ACGIH TWA (ppm)	20 ppm
USA ACGIH	ACGIH chemical category	Not Classifiable as a Human Carcinogen
USA NIOSH	NIOSH REL (TWA) (mg/m ³)	375 mg/m ³
USA NIOSH	NIOSH REL (TWA) (ppm)	100 ppm
USA NIOSH	NIOSH REL (STEL) (mg/m ³)	560 mg/m ³
USA NIOSH	NIOSH REL (STEL) (ppm)	150 ppm
USA IDLH	US IDLH (ppm)	500 ppm
USA OSHA	OSHA PEL (TWA) (ppm)	200 ppm
USA OSHA	OSHA PEL (Ceiling) (ppm)	300 ppm

Appropriate engineering controls: Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure. Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e., there is no leakage from the equipment). Local exhaust and general ventilation must be adequate to meet exposure standards. Site-specific risk assessments should be conducted to determine the appropriate exposure control measures. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. Ensure all national/local regulations are observed.

Personal protective equipment: Gloves. Safety glasses. Insufficient ventilation: wear respiratory protection. Protective clothing.

Materials for Protective Clothing: Chemically resistant materials and fabrics.



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Hand Protection: Protective gloves.

Eye Protection: Chemical safety goggles.

Skin and Body Protection: Wear suitable protective clothing.

Respiratory Protection: If exposure limits are exceeded or irritation is experienced, approved respiratory protection should be worn.

Other Information: When using, do not eat, drink, or smoke.

9. Physical and Chemical Properties

Information on basic physical and chemical properties

Physical State:	Solid
Appearance:	Multi-colored granules
Odor:	None
Odor Threshold:	No data available
pH:	Not applicable
Melting point:	65°C (149°F)
Freezing point:	No data available
Boiling Point:	No data available
Flash Point:	Not applicable
Auto-ignition Temperature:	No data available
Evaporation Rate:	No data available
Flammability (solid, gas):	No data available
Vapor Pressure:	No data available
Relative Vapor Density at 20°C:	No data available
Water Solubility:	Partially
Partition Coefficient: N-Octanol/Water:	No data available
Viscosity:	No data available

Other Information: No additional information available

10. Stability and Reactivity

Reactivity: Hazardous reactions will not occur under normal conditions.

Chemical Stability: Stable under recommended handling and storage conditions (see section 7).

Possibility of Hazardous Reactions: Hazardous polymerization will not occur.

Conditions to Avoid: Protect from moisture. Keep away from heat. Sparks, heat, open flame and other sources of ignition.



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Incompatible Materials: Alkalis. Heat sources. Reducing agents. Oxidizers.

Hazardous Decomposition Products: Thermal decomposition generates: Nitrogen oxides. Ammonia. Carbon oxides (CO₂). Formaldehyde.

11. Toxicological Information

Information on Toxicological Effects

Acute Toxicity: Not classified.

Silica, amorphous (7631-86-9)	
LD50 Oral Rat	> 5000 mg/kg
LD50 Dermal Rabbit	> 2000 mg/kg
LC50 Inhalation	> 2.2 mg/l (Exposure time: 1 h)
Dithiopyr (97886-45-8)	
LD50 Oral Rat	> 5 g/kg
LC50 Inhalation Rat	> 6 g/m ³ (Exposure time: 4 h)
Toluene (108-88-3)	
LD50 Oral Rat	5580 mg/kg
LD50 Dermal Rabbit	12000 mg/kg
LC50 Inhalation Rat	12.5 mg/l/4h
ATE (Vapors)	25.70 mg/l/4h

Skin Corrosion/Irritation: Causes skin irritation.

pH: Not applicable

Serious Eye Damage/Irritation: Causes serious eye irritation.

pH: Not applicable

Respiratory or Skin Sensitization: Not classified

Germ Cell Mutagenicity: Not classified

Carcinogenicity: Not classified

Silica, amorphous (7631-86-9)	
IARC Group	3
Toluene (108-88-3)	
IARC Group	3

Reproductive Toxicity: Not classified

Specific Target Organ Toxicity (Single Exposure): Not classified

Specific Target Organ Toxicity (Repeated Exposure): Not classified

Aspiration Hazard: Not classified



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Symptoms/Injuries After Inhalation: Repeated or prolonged exposure to respirable (airborne) crystalline silica dust will cause lung damage in the form of silicosis. Symptoms will include progressively more difficult breathing, cough, fever, and weight loss.

Symptoms/Injuries After Skin Contact: Causes skin irritation. Symptoms may include: redness, pain, swelling, itching, burning, dryness, and dermatitis.

Symptoms/Injuries After Eye Contact: Causes serious eye irritation. Symptoms may include: redness, pain, swelling, itching, burning, tearing, and blurred vision.

Symptoms/Injuries After Ingestion: Ingestion is likely to be harmful or have adverse effects.

Chronic Symptoms: Pre-existing lung diseases such as emphysema or asthma may be aggravated by exposure to dusts. Pulmonary function may be reduced by inhalation of respirable crystalline silica. Also lung scarring produced by such inhalation may lead to a progressive massive fibrosis of the lung which may aggravate other pulmonary conditions and diseases and which increases susceptibility to pulmonary tuberculosis. Progressive massive fibrosis may be accompanied by right heart enlargement, heart failure, and pulmonary failure. Smoking aggravates the effects of exposure. May causes damage to organs through prolonged or repeated exposure.

12. Ecological Information

Toxicity

Ecology – General: Harmful to aquatic life.

Potassium (7440-09-7)	
EC50 Daphnia 1	53.2 mg/l

Silica, amorphous (7631-86-9)	
LC50 Fish 1	5000 mg/l (Exposure time: 96 h – Species: Brachydanio rerio [static])
EC50 Daphnia 1	7600 mg/l (Exposure time: 48 h – Species: Ceriodaphnia dubia)

Toluene (108-88-3)	
LC50 Fish 1	15.22 (15.22-19.05) mg/l (Exposure time: 96 h – Species: Pimephales promelas [flow-through])
EC50 Daphnia 1	5.46 (5.46-9.83) mg/l (Exposure time: 48 h – Species: Daphnia magna [Static])
LC50 Fish 2	12.6 mg/l (Exposure time: 96 h – Species: Pimephales promelas [static])
EC50 Daphnia 2	11.5 mg/l (Exposure time: 48 h – Species: Daphnia magna)
NOEC chronic crustacea	0.74 mg/l (Ceriodaphnia dubia)

Persistence and Degradability

Fertilizer with Lasar	
Persistence and Degradability	May causes long-term adverse effects in the environment. This product is water soluble and eventually biodegrades into elemental nitrogen. Excess nitrogen and nitrates in a body of water will contribute to eutrophication with visible effects such as toxic algae bloom.



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Bioaccumulative Potential

Silica, amorphous (7631-86-9)	
BCF fish 1	(No bioaccumulation expected)
Dithiopyr (97886-45-8)	
Low Pog	4.75
Toluene (108-88-3)	
Low Pog	2.65

Mobility in Soil: No additional information available

Other Adverse Effects:

Other information: Avoid release to the environment.

13. Disposal Considerations

Waste treatment methods

Waste Treatment Methods: Pesticide: Wastes resulting from the use of this product that cannot be used or chemically reprocessed should be disposed of in a landfill approved for pesticide disposal or in accordance with applicable Federal, State or local procedures. Or call (1-800-CLEANUP) for disposal instructions. Never place unused product down any indoor or outdoor drain. Container: Do not reuse bag. Dispose of emptied bag(s) in a sanitary landfill approved for pesticide disposal, or by incineration.

Additional Information: Dispose of waste material in accordance with all local, regional, national, and international regulations.

Ecology – Waste Materials: This material is hazardous to the aquatic environment. Keep out of sewers and waterways.

14. Transport Information

In Accordance with DOT: Not regulated for transport

In Accordance with IMDG: Not regulated for transport

In Accordance with IATA: Not regulated for transport

15. Regulatory Information

OSHA Hazard Communication Standard

This product is a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

Superfund Amendments and Reauthorization Act of 1986 Title III (Emergency Planning and Community Right-to-Know Act of 1986) Sections 311 and 312

Acute Health Hazard

Chronic Health Hazard



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California Proposition 65 (Safe Drinking Water and Toxic Enforcement Act of 1986):

WARNING: This product contains chemical(s) known to the State of California to cause birth defects or other reproductive harm.

Pennsylvania (Worker and Community Right-to-Know Act): Pennsylvania Hazardous Substances List and/or Pennsylvania Environmental Hazardous Substance List: The following product components are cited in the Pennsylvania Hazardous Substance List and/or the Pennsylvania Environmental Substance List, and are present at levels which require reporting.

Components	CASRN
Cyclohexanone	108-94-1
2-Ethylhexanol	104-76-7
Toluene	108-88-3

Pennsylvania (Worker and Community Right-To-Know Act): Pennsylvania Special Hazardous Substances List: To the best of our knowledge, this product does not contain chemicals at levels which require reporting under this statute.

United States TSCA Inventory (TSCA)

This product contains a chemical substance(s) exempt from U.S. EPA TSCA Inventory requirements. It is regulated as a pesticide subject to Federal Insecticide, Fungicide, and Rodenticide Act (FIFRA) requirements.

Federal Insecticide, Fungicide and Rodenticide Act

EPA Registration Number: 62719-485-48234

This chemical is a pesticide product registered by the Environmental Protection Agency and is subject to certain labeling requirements under federal pesticide law. These requirements differ from the classification criteria and hazard information required for safety data sheets, and for workplace labels of non-pesticide chemicals. Following is the hazard information as required on the pesticide label:

CAUTION

Harmful if absorbed through skin

16. Other Information

Hazard Rating System

NFPA

Health – 1

Fire – 0

Reactivity – 0

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