

Safety Data Sheet (SDS) Kirby 4 : 1 Livestock Mineral OA

SECTION 1: IDENTIFICATION

PRODUCT NAME	Kirby 4 : 1 Livestock Mineral OA
SDS NUMBER	Feed
INTENDED USE:	Feed
MANUFACTURER:	Kirby Agri, Inc. 500 Running Pump Road Lancaster, PA 17601
EMERGENCY HEALTH AND SAFETY NUMBER:	
SDS INFORMATION:	PHONE: 717-299-2541 EMAIL: john@kirbyagri.com URL: www.kirbyagri.com

SECTION 2: HAZARD(S) IDENTIFICATION

Hazard Classification

Eye Damage Category – 2B

Skin Irritation Category - 3

Specific Target Organ Toxicity Single Exposure Category - 3 (Respiratory System)

Carcinogen Category - 1 (due to presence of $\geq 0.1\%$ crystalline silica)

Signal Word: Danger

Hazard Statements: May Cause Skin Irritation, May Cause Eye Damage, May Cause Cancer (due to presence of $\geq 0.1\%$ crystalline silica), May Cause Respiratory Irritation

Symbols:



PRECAUTIONARY STATEMENT(S): May be mechanical eye irritant. Rinse eyes with water for several minutes. Avoid breathing dust. Excessive inhalation may affect nose throat, and lungs. Feed dust may burn if suspended in air and may create a flash fire/ explosion hazard. Avoid ignition sources.

EMERGENCY OVERVIEW: May be mechanical irritant to eyes. Excessive inhalation of feed dusts may affect nose throat, and lungs. May form combustible dust concentration in air; see “explosion hazard” below.

EXPLOSION HAZARD: Feed is generally considered not hazardous, but dust generated through downstream activities that may reduce its particle size (e.g., shipping, handling, transfer to bins, etc.) May create a hazardous condition. If exposed to an ignition source, feed dust may burn. Airborne dust in sufficient concentrations when exposed to an ignition source may flash or, in a confined situation, may fuel an explosion.

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

Mineral may contain some or all of the following:

COMPONENT	CAS NO.	CONCENTRATION
Limestone	1317-65-3	45 – 55%
Monocalcium Phosphate	7758-23-8	20 – 25%
Salt	7647-14-5	15 – 20%
Magnesium Oxide	1309-48-4	<10%
Calcium Sulfate	7778-18-9	<5%
Potassium Magnesium Sulfate	14977-37-8	<5%
Potassium Chloride	7447-40-7	<5%
Dust from prepared animal feeds (Grains, Plant Proteins, Vitamins and Minerals)		<5%
Manganese Sulfate	10034-96-5	<2%
Zinc Sulfate	7446-19-7	<2%
Ferrous Sulfate	17375-41-6	<1%
Crystalline Silica	13808-60-7	<2%
Copper Sulfate	7758-99-8	<1%
Selenium	7789-49-2	<1%

May also contain a proprietary blend of some or all of the following: Additional Macro Minerals, Additional Micro Minerals, Vitamins, DFM's, Yeast Culture, and Enzymes.

SECTION 4: FIRST-AID MEASURES

Description of First Aid Measures

Inhalation: Remove Person from exposure. Seek medical attention for any breathing difficulty.

Ingestion: If swallowed, give several glasses of water to dilute. Never give anything by mouth to an unconscious person.

Skin Contact: Wash affected skin with soap and water.

Eye Contact: Flush eyes with water. Seek medical attention as needed.

Most Important Symptoms

Irritation of skin, eyes, gastrointestinal tract, or respiratory tract. Long term exposure by inhalation may cause permanent damage. This product contains crystalline silica, which has been classified by IARC as a Group 1 carcinogenic to humans when inhaled. Inhalation of silica may also cause a chronic lung disorder - silicosis.

c. Indication of Any Immediate Medical Attention and Special Treatment Needed:

See first aid information above. Note to physicians: Provide general supportive measures and treat symptomatically.

SECTION 5: FIRE FIGHTING MEASURES

Hazardous Combustion Products: Oxides of Carbon.

Special Fire Fighting Procedures: Extinguish with water fog, dry chemical powders or foam. Do not use strong streams of water or dry chemical if dust can be dispersed into the air. Dust placed in suspension with an ignition source present may flash or explode.

Unusual Fire or Explosion Hazards: Explosion hazard may exist for combustible dusts of certain particle size and moisture content when suspended in air at certain concentrations and subjected to an ignition source.

SECTION 6: ACCIDENTAL RELEASE MEASURES

Clean up with soft bristle broom(s) or a vacuum approved for a class ii hazardous location. Dust deposits should be maintained to a minimum on surfaces, as these could form an explosive mixture if they are released into the atmosphere in sufficient concentration. avoid dispersal of dust in the air (i.e., cleaning dust surfaces with compressed air in the presence of ignition source should not be allowed). non-sparking tools should be used.

SECTION 7: HANDLING AND STORAGE

Avoid dispensing dust in air and exposure to potential ignition sources. remove feed dust from area/processing equipment prior to using any heat producing equipment such as arc welders, cutting torches and spark/heat producing tools such as portable surface grinders.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

Mineral may contain some or all of the following in significant quantities.

Substance	CAS No.	OSHA PEL	NIOSH REL	ACGIH 2015
Limestone	1317-65-3	15 mg/m ³ (total dust) 5 mg/m ³ (respirable)	Unknown	TLV 5 mg/m ³ (respirable) 15 mg/m ³ (total)
Crystalline Silica	14808-60-7	10 mg/m ³ divided by (the percentage of silica in the dust plus 2) (respirable)	Unknown	TLV: 0.025 mg/m ³
Sodium Chloride	7647-14-5	Not Listed	Not Listed	Not Listed
Magnesium Oxide Fume - total particulate	1309-48-4	15 mg/m ³	Unknown	10 mg/m ³ (IHL)
Calcium Sulfate	7778-18-9	15 mg/m ³ (total dust) 5 mg/m ³ (respirable)	10 mg/m ³ (total dust) 5 mg/m ³ (respirable)	10 mg/m ³ (IHL)
Potassium Magnesium Sulfate	14977-37-8	TWA 15 mg/m ³ (total dust) 5 mg/m ³ (respirable)	Unknown	TWA 3 mg/m ³ (respirable) 10 mg/m ³ (total)
Potassium Chloride	7447-40-7	TWA 15 mg/m ³ (total dust) 5 mg/m ³ (respirable)	Unknown	TWA 3 mg/m ³ (respirable) 10 mg/m ³ (total)
Monocalcium Phosphate Monohydrate	10031-30-8	TWA 15 mg/m ³ (total dust) 5 mg/m ³ (respirable)		TLV 3 mg/m ³ (respirable) 10 mg/m ³ (inhalable)

Engineering Controls:

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 areas. Use only appropriately classified electrical equipment and powered industrial trucks.

Avoid dust accumulation and control ignition sources. where appropriate, employ grounding, venting, and explosion relief provisions in accordance with accepted engineering practices in processes capable of generating dust and/or static electricity. Avoid accumulation of dust on surfaces to prevent secondary dust explosions. refer to appropriate osha, nfpa and applicable standards.

Individual Protection Measures:

General Hygiene Considerations: When using do not eat, drink or smoke. Wash contaminated clothing before reuse.

Regular cleaning of equipment, work area and clothing is recommended.

Eye/face protection: Tight sealing safety goggles. Face protection shield.

Skin and body protection: No special technical protective measures are necessary.

Respiratory protection: May cause irritation of the nasal membranes or the upper respiratory tract. if dust exceeds the nuisance level. Wear an approved niosh dust respirator whenever dust concentrations in the work area are above acgih tlv/osha pels.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Appearance:	Off white to Tan to Grey
Odor:	No information available
Odor threshold	No information available
pH @ 25°C:	No information available
Melting Point:	No information available
Flash Point:	No information available
Evaporation Rate:	No information available
Flammability:	No information available
Vapor Pressure:	No information available
Specific Gravity:	No information available
Bulk Density:	No information available
Solubility in Water:	No information available
Auto-Ignition Temperature:	No information available

SECTION 10: STABILITY AND REACTIVITY

Reactivity:	No data available.
Chemical stability:	Stable under recommended storage conditions.
Possibility of Hazardous Reactions:	None under normal processing.
Conditions to avoid:	Do not allow premix to come in contact with substances mentioned below without taking appropriate precautions.
Incompatible materials:	Premixes with high limestone levels should not be mixed or stored with the following materials due to the potential for violent reactions: <ul style="list-style-type: none">a. Acidsb. Reactive fluorinated compoundsc. Reactive brominated compoundsd. Organic acid anhydridese. Nitro - organic compoundsf. Reactive phosphorous compoundsg. Interhalogenated compounds
Hazardous Decomposition Products:	None known based on information supplied.

SECTION 11: TOXICOLOGICAL INFORMATION

Information on the Likely Routes of Exposure: See First Aid discussion above.

Symptoms Related to Physical, Chemical and Toxicological Characteristics: See First Aid discussion above.

Delayed and Immediate Effects and Also Chronic Effects From Exposure: See First Aid discussion above.

Numerical Measures of Toxicity: NA

Carcinogen Listing: This premix contains Limestone which is not listed by MSHA, OSHA, or IARC as a carcinogen;

however, this product contains crystalline silica, which has been classified by IARC as a (Group 1) carcinogen to humans when inhaled.

SECTION 12: ECOLOGICAL INFORMATION: (NON-MANDATORY)

SECTION 13: DISPOSAL CONSIDERATIONS: (NON-MANDATORY)

SECTION 14: TRANSPORT INFORMATION: (NON-MANDATORY)

SECTION 15: REGULATORY INFORMATION:

Section (b)(5)(iii) of the HCS (CFR 1910.1200) exempts food, including feed and therefore any associated feed dust, from the labeling requirements of the HCS since the food/feed is subject to the labeling requirements of the food & drug administration.

SECTION 16: OTHER INFORMATION

Seller makes no warranty, expressed or implied, concerning the product or the merchantability or fitness thereof for any purpose or concerning the accuracy of any information provided by Kirby Agri, Inc. except that the product shall conform to contracted specifications. The information provided herein is believed by Kirby Agri to be accurate at the time of preparation. This SDS is prepared from sources believed to be reliable; however, it is the responsibility of the user to investigate and understand other pertinent sources of information, to comply with all laws and procedures applicable to the safe handling and use of this product, and to determine the suitability of the product for its intended use. Buyer's exclusive remedy shall be for damages and no claim of any kind, whether as to product delivered or for non-delivery of product, and whether based on contract, breach of warranty, negligence, or otherwise shall be greater in amount than the purchase price of the quantity of product with respect to which damages are claimed. In no event shall Seller be liable for incidental or consequential damages, whether Buyer's claim is based on contract, breach of warranty, negligence or otherwise.

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