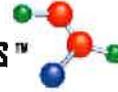




INSPIRED MOLECULAR SOLUTIONS™



Kemin Industries, Inc.
2100 Maury Street
Des Moines, IA 50317, USA
toll free: 800.777.8307
www.kemin.com

January 16, 2018

Kathy Houston
Ag ProVision, LLC.
277 Faison McGowan Road
Kenansville, NC 28349

Re: Good Manufacturing Practices

Dear Ms. Houston,

Kemin certifies that its operations are in compliance with all applicable provisions of U.S. Food and Drug Administration (FDA) regulations 21 CFR 507, and we follow Good Manufacturing Practices. Kemin uses ISO 22000:2005 as our Food Safety Management System, which is recognized under the Global Food Safety Initiative.

Further, Kemin utilizes detailed standard operating procedures to prevent contamination during receiving, processing, storage, and shipment. Kemin is also certified by the American Feed Industry Association's International Safe Feed/Safe Food program, which meets the requirements of FAMI-QS Code of Practice for Feed Additive and Premixture Operators.

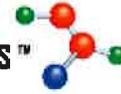
Kemin participates in an annual internal audit program. Kemin has also been inspected by the FDA in Nov. 2011 with no findings from the inspection. Should our compliance status with the above mentioned FDA regulations change, we will notify customers prior to this change.

Should you require further information, please contact me by telephone at 515.559.5209 or by email at kelley.brady@kemin.com.

Regards,

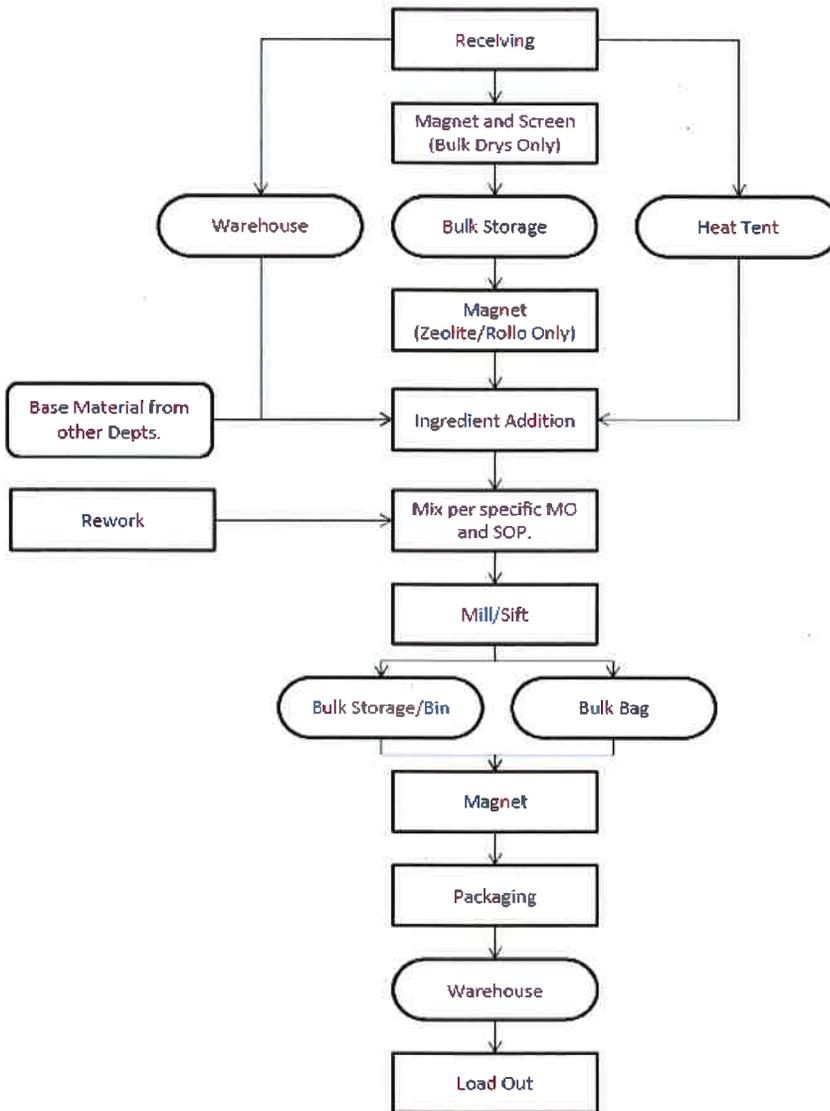
A handwritten signature in blue ink that reads "Kelley Brady".

Kelley Brady
Regulatory Affairs Assistant
Kemin Industries, Inc. d/b/a
Kemin Animal Nutrition & Health, North America



January 12, 2018

Dry Mix Process Flow Diagram



Kelley Brady
Regulatory Affairs Assistant

Certificate of Compliance

The Food Safety Management System of

Kemin Agrifood North America, Inc.

2100 Maury Street

Des Moines, IA 50306 USA

has been assessed and complies with the requirements of

ISO 22000:2005

Food safety management systems -
Requirements for any organization in the food
chain

Scope: **Ingredients for the Food Industry**

Antioxidants, Mold Inhibitors, Flavors, Natural Plant Extracts, Antimicrobials

Ingredients for the Feed Industry

Forage Preservatives, Surfactants, Enzymes, Acidifiers, Trace Minerals, Carotenoids,
Amino Acids, Probiotics, Anti-Caking Ag

Activity: **Food Manufacturing**



Food Safety Management Systems

Certificate Number: D1510101
Date of issue: December 28th, 2015
Initial Issue Date: December 28th, 2015
Date of expiry: December 28th, 2018
Authorized by: Eurofins Scientific, Inc.
Issuing Officer: FSS Director,
Gary M. Smith




Operations Manager
Authorized By

Certificate of Registration

The Food Safety Management System of

Kemin AgriFoods North America, Inc.

2100 Maury Street

Des Moines, IA 50306, USA

has been assessed and complies with the requirements of

FOOD SAFETY SYSTEM CERTIFICATION 22000

Certification Scheme for Food Safety Systems
Including ISO 22000:2005, ISO/TS 22002-1:2009
for Food Manufacturing and additional
FSSC 22000 Requirements

This Certificate is applicable for

Category: K: (Bio)Chemicals

Scope: Manufacturing and production of ingredients for the purpose of antioxidants, mold inhibitors, flavors, natural plant extracts, antimicrobials, forage preservatives, surfactants, enzymes, acidifiers, trace minerals, carotenoids, amino acids, probiotics, and anti-caking agents for the food and feed industry

This Certificate is provided on the base of the FSSC 22000 Certification Scheme, version 3.2, published on 26 February 2015. The Certification System consists of a minimum annual audit of the Food Safety Management Systems and a minimum annual verification of the PRP elements and additional requirements as included in the scheme and ISO/TS 22002-1:2009 for Food Manufacturing.

Certificate Number: C1510101
Date of Decision: Dec 28th, 2015
Date of issue: Jul 12th, 2016
Initial Date of Issue: Dec 28th, 2015
Date of expiry: Dec 28th, 2018
Authorized by: Eurofins Scientific, Inc.
Issuing Officer: Gary M. Smith




FSS Director
Issuing Officer


Operations Manager
Authorized By

Certificate of Compliance

Eurofins Certification hereby certifies that the company

Kemin AgriFoods North America, Inc

has implemented and maintains a Feed Safety Management System including Good Manufacturing Practice (GMP) in compliance with: **FAMI-QS Code (Version 5.1, 2014-02-14) AFIA International Safe Feed/Safe Food** on the following site/s:

**2100 Maury Street
Des Moines, IA 50305**

for

Activity: Production

Scope: B1. Premixtures

Date of issue: December 28, 2015
Date of expiry: December 28, 2018
Authorized by: Eurofins Scientific, Inc.
Issuing Officer: Gary M. Smith
Certificate Number: G1511001
FAMI-QS Registry: FAM-ISFSF-001



Authorized By



Issuing Officer



FAMI_{qs}

* Refer to report for further details

* For the validity of the certificate please check www.fami-qs.org

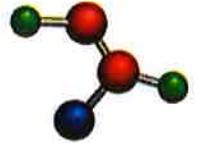
* Valid for a period of 3 years from the date of issue subject to satisfactory surveillance.

USA 2200 Rittenhouse St. Suite 150, Des Moines, IA 50321
P (515) 265-6979 F (515) 266-5453

www.eurofinsus.com/food-safety



INSPIRED MOLECULAR SOLUTIONS™



CLOSTAT® Dry

Product 016598-21-US

Description

A direct-fed microbial to help support intestinal microbial balance in livestock, poultry and equine. Contains a source of live (viable) naturally occurring microorganisms.

Guaranteed Analysis

Bacillus subtilis (min): 1×10^{11} CFU/lb (2.2×10^8 CFU/g) *Colony Forming Units

Ingredients

Calcium Carbonate, Mineral Oil, Maltodextrin and Dried Bacillus subtilis Fermentation Product

Directions

Dairy: 13g/head/day

Swine and Poultry: 1 lb per ton of finished or complete feed

Equine: 2.5 - 4 lbs per ton of finished or complete feed

Storage

Store in a cool, dry place out of direct sunlight. Keep bag closed when not in use

Patents

U.S. Patent 7,247,299; Canada Patent 2,503,130; Australia Patent 2003291514; France, Germany, Ireland, Italy, Netherlands, Spain, Switzerland and United Kingdom Patent 1576120; Japan Patent 4989851; New Zealand Patent 568391.

The manufacturer makes no warranties, expressed or implied, concerning this product or its use, which extend beyond the description on the face hereof. All statements made concerning this product apply only when used as directed.

FOR MANUFACTURING USE. PRODUCT COLOR CHANGE WILL NOT AFFECT PERFORMANCE.

LOT NO.: **0123456789**
NET WT.: **25 KG (55.115 LB)**

MFG. DATE: **Jan 2017 (MMM YYYY)**

KEMIN INDUSTRIES, INC.
DES MOINES, IOWA U.S.A. 50317

TAKE TIME



OBSERVE LABEL
DIRECTIONS



Product Specifications

2100 Maury Street • Des Moines, Iowa, USA 50317 • tel: 515.559.5100 • www.kemin.com

CLOSTAT® brand Dry Direct-Fed Microbial

DESCRIPTION

A direct-fed microbial to help support intestinal microbial balance in livestock, poultry and equine. Contains a source of live (viable) naturally occurring microorganisms.

INGREDIENTS

Calcium Carbonate, Mineral Oil, Maltodextrin and Dried *Bacillus subtilis* Fermentation Product.

QUALITY SPECIFICATIONS	
Guaranteed analysis	<i>Bacillus subtilis</i> (min.): 1 x 10 ¹¹ CFU*/lb (2.2 x 10 ⁸ CFU/g) *Colony Forming Units
Color	Tan
TYPICAL CHARACTERISTICS	
Flowability	Good

INSTRUCTIONS FOR USE

Dairy: 13g/head/day

Swine and Poultry: 1 lb per ton of finished or complete feed

Equine: 2.5 – 4 lbs per ton of finished or complete feed

STORAGE

Store in a cool, dry place out of direct sunlight. Keep bag closed when not in use.

PACKAGING

25 kg bag

U.S. Patent 7,247,299; Canada Patent 2,503,130; Australia Patent 2003291514; France, Germany, Ireland, Italy, Netherlands, Spain, Switzerland and United Kingdom Patent 1576120; Japan Patent 4989851; New Zealand Patent 568391.



SAFETY DATA SHEET

1. Identification

Product identifier CLOSTAT® DRY

Other means of identification

Product code 016598

Recommended use As a direct-fed microbial for animal feeds.

Recommended restrictions None known.

Manufacturer/Importer/Supplier/Distributor information

Manufacturer

Company name Kemin Industries, Inc.

Address 2100 Maury Street
Des Moines, Iowa 50317
United States

Telephone (515) 559-5100

Website [http://www.kemin.com/](http://www.kemin.com/media@kemin.com)

E-mail media@kemin.com

Emergency phone number CHEMTREC 1-800-424-9300

2. Hazard(s) identification

Physical hazards Not classified.

Health hazards Not classified.

Environmental hazards Not classified.

OSHA defined hazards Not classified.

Label elements

Hazard symbol None.

Signal word None.

Hazard statement The mixture does not meet the criteria for classification.

Precautionary statement

Prevention Observe good industrial hygiene practices.

Response Wash hands after handling.

Storage Store away from incompatible materials.

Disposal Dispose of waste and residues in accordance with local authority requirements.

Hazard(s) not otherwise classified (HNOC) None known.

Supplemental information None.

3. Composition/information on ingredients

Mixtures

Chemical name	Common name and synonyms	CAS number	%
Calcium Carbonate		471-34-1	90 - 100
Other components below reportable levels			< 1

*Designates that a specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. First-aid measures

Inhalation Move to fresh air. Call a physician if symptoms develop or persist.

Skin contact Wash off with soap and water. Get medical attention if irritation develops and persists.

Eye contact Rinse with water. Get medical attention if irritation develops and persists.

Ingestion Rinse mouth. Get medical attention if symptoms occur.

Most important symptoms/effects, acute and delayed	Coughing.
Indication of immediate medical attention and special treatment needed	Treat symptomatically.
General information	Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

5. Fire-fighting measures

Suitable extinguishing media	Water fog. Foam. Dry chemical powder. Carbon dioxide (CO ₂).
Unsuitable extinguishing media	Do not use water jet as an extinguisher, as this will spread the fire.
Specific hazards arising from the chemical	During fire, gases hazardous to health may be formed.
Special protective equipment and precautions for firefighters	Self-contained breathing apparatus and full protective clothing must be worn in case of fire.
Fire fighting equipment/instructions	Use water spray to cool unopened containers.
Specific methods	Use standard firefighting procedures and consider the hazards of other involved materials.
General fire hazards	No unusual fire or explosion hazards noted.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures	Keep unnecessary personnel away. For personal protection, see section 8 of the SDS.
Methods and materials for containment and cleaning up	Stop the flow of material, if this is without risk. Following product recovery, flush area with water. For waste disposal, see section 13 of the SDS.
Environmental precautions	Avoid discharge into drains, water courses or onto the ground.

7. Handling and storage

Precautions for safe handling	Avoid prolonged exposure. Observe good industrial hygiene practices.
Conditions for safe storage, including any incompatibilities	Store in original tightly closed container. Store away from incompatible materials (see Section 10 of the SDS).

8. Exposure controls/personal protection

Occupational exposure limits

US. OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)

Components	Type	Value	Form
Calcium Carbonate (CAS 471-34-1)	PEL	5 mg/m ³	Respirable fraction.
		15 mg/m ³	Total dust.

US. NIOSH: Pocket Guide to Chemical Hazards

Components	Type	Value	Form
Calcium Carbonate (CAS 471-34-1)	TWA	5 mg/m ³	Respirable.
		10 mg/m ³	Total

Biological limit values	No biological exposure limits noted for the ingredient(s).
Appropriate engineering controls	Good general ventilation (typically 10 air changes per hour) should be used. Ventilation rates should be matched to conditions. If applicable, use process enclosures, local exhaust ventilation, or other engineering controls to maintain airborne levels below recommended exposure limits. If exposure limits have not been established, maintain airborne levels to an acceptable level.
Individual protection measures, such as personal protective equipment	
Eye/face protection	Wear safety glasses with side shields (or goggles).
Skin protection	
Hand protection	Wear appropriate chemical resistant gloves. Suitable gloves can be recommended by the glove supplier.

Other	Wear suitable protective clothing.
Respiratory protection	In case of insufficient ventilation, wear suitable respiratory equipment.
Thermal hazards	Wear appropriate thermal protective clothing, when necessary.
General hygiene considerations	Always observe good personal hygiene measures, such as washing after handling the material and before eating, drinking, and/or smoking. Routinely wash work clothing and protective equipment to remove contaminants.

9. Physical and chemical properties

Appearance

Physical state	Solid.
Form	Solid.
Color	Tan.
Odor	Not available.
Odor threshold	Not available.
pH	Not available.
Melting point/freezing point	Not available.
Initial boiling point and boiling range	Not available.
Flash point	Not available.
Evaporation rate	Not available.
Flammability (solid, gas)	Not available.
Upper/lower flammability or explosive limits	
Flammability limit - lower (%)	Not available.
Flammability limit - upper (%)	Not available.
Explosive limit - lower (%)	Not available.
Explosive limit - upper (%)	Not available.
Vapor pressure	0.000005 hPa estimated
Vapor density	Not available.
Relative density	Not available.
Solubility(ies)	
Solubility (water)	Not available.
Partition coefficient (n-octanol/water)	Not available.
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
Viscosity	Not available.
Other information	
Explosive properties	Not explosive.
Oxidizing properties	Not oxidizing.

10. Stability and reactivity

Reactivity	The product is stable and non-reactive under normal conditions of use, storage and transport.
Chemical stability	Material is stable under normal conditions.
Possibility of hazardous reactions	No dangerous reaction known under conditions of normal use.
Conditions to avoid	Contact with incompatible materials.
Incompatible materials	Acids. Fluorine.
Hazardous decomposition products	No hazardous decomposition products are known.

11. Toxicological information

Information on likely routes of exposure

Inhalation	Prolonged inhalation may be harmful.
Skin contact	No adverse effects due to skin contact are expected.
Eye contact	Direct contact with eyes may cause temporary irritation.
Ingestion	Expected to be a low ingestion hazard.

Symptoms related to the physical, chemical and toxicological characteristics Coughing.

Information on toxicological effects

Acute toxicity

Components	Species	Test Results
Calcium Carbonate (CAS 471-34-1)		
Acute		
Oral		
LD50	Mouse	6450 mg/kg
	Rat	6450 mg/kg

* Estimates for product may be based on additional component data not shown.

Skin corrosion/irritation Prolonged skin contact may cause temporary irritation.

Serious eye damage/eye irritation Direct contact with eyes may cause temporary irritation.

Respiratory or skin sensitization

Respiratory sensitization Not a respiratory sensitizer.

Skin sensitization This product is not expected to cause skin sensitization.

Germ cell mutagenicity No data available to indicate product or any components present at greater than 0.1% are mutagenic or genotoxic.

Carcinogenicity This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA.

IARC Monographs. Overall Evaluation of Carcinogenicity

Not listed.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

US. National Toxicology Program (NTP) Report on Carcinogens

Not listed.

Reproductive toxicity This product is not expected to cause reproductive or developmental effects.

Specific target organ toxicity - single exposure Not classified.

Specific target organ toxicity - repeated exposure Not classified.

Aspiration hazard Not an aspiration hazard.

Chronic effects Prolonged inhalation may be harmful.

12. Ecological information

Ecotoxicity The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Components	Species	Test Results
Calcium Carbonate (CAS 471-34-1)		
Aquatic		
Fish	LC50	Western mosquitofish (<i>Gambusia affinis</i>) > 56000 mg/l, 96 hours

* Estimates for product may be based on additional component data not shown.

Persistence and degradability No data is available on the degradability of this product.

Bioaccumulative potential No data available.

Mobility in soil No data available.
Other adverse effects No other adverse environmental effects (e.g. ozone depletion, photochemical ozone creation potential, endocrine disruption, global warming potential) are expected from this component.

13. Disposal considerations

Disposal instructions Collect and reclaim or dispose in sealed containers at licensed waste disposal site.
Local disposal regulations Dispose in accordance with all applicable regulations.
Hazardous waste code The waste code should be assigned in discussion between the user, the producer and the waste disposal company.
Waste from residues / unused products Dispose of in accordance with local regulations. Empty containers or liners may retain some product residues. This material and its container must be disposed of in a safe manner (see: Disposal instructions).
Contaminated packaging Since emptied containers may retain product residue, follow label warnings even after container is emptied. Empty containers should be taken to an approved waste handling site for recycling or disposal.

14. Transport information

DOT

Not regulated as dangerous goods.

IATA

Not regulated as dangerous goods.

IMDG

Not regulated as dangerous goods.

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable.

15. Regulatory information

US federal regulations This product is not known to be a "Hazardous Chemical" as defined by the OSHA Hazard Communication Standard, 29 CFR 1910.1200.

TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)

Not regulated.

CERCLA Hazardous Substance List (40 CFR 302.4)

Not listed.

SARA 304 Emergency release notification

Not regulated.

OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)

Not regulated.

Superfund Amendments and Reauthorization Act of 1986 (SARA)

Hazard categories Immediate Hazard - No
Delayed Hazard - No
Fire Hazard - No
Pressure Hazard - No
Reactivity Hazard - No

SARA 302 Extremely hazardous substance

Not listed.

SARA 311/312 Hazardous chemical No

SARA 313 (TRI reporting)

Not regulated.

Other federal regulations

Clean Air Act (CAA) Section 112 Hazardous Air Pollutants (HAPs) List

Not regulated.

Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130)

Not regulated.

Safe Drinking Water Act (SDWA) Not regulated.

US state regulations

US. California Controlled Substances. CA Department of Justice (California Health and Safety Code Section 11100)

Not listed.

US. Massachusetts RTK - Substance List

Calcium Carbonate (CAS 471-34-1)

US. New Jersey Worker and Community Right-to-Know Act

Calcium Carbonate (CAS 471-34-1)

US. Pennsylvania Worker and Community Right-to-Know Law

Calcium Carbonate (CAS 471-34-1)

US. Rhode Island RTK

Not regulated.

US. California Proposition 65

California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65): This material is not known to contain any chemicals currently listed as carcinogens or reproductive toxins.

International Inventories

Country(s) or region	Inventory name	On inventory (yes/no)*
Australia	Australian Inventory of Chemical Substances (AICS)	No
Canada	Domestic Substances List (DSL)	Yes
Canada	Non-Domestic Substances List (NDSL)	No
China	Inventory of Existing Chemical Substances in China (IECSC)	No
Europe	European Inventory of Existing Commercial Chemical Substances (EINECS)	No
Europe	European List of Notified Chemical Substances (ELINCS)	No
Japan	Inventory of Existing and New Chemical Substances (ENCS)	No
Korea	Existing Chemicals List (ECL)	No
New Zealand	New Zealand Inventory	Yes
Philippines	Philippine Inventory of Chemicals and Chemical Substances (PICCS)	No
United States & Puerto Rico	Toxic Substances Control Act (TSCA) Inventory	Yes

*A "Yes" indicates that all components of this product comply with the inventory requirements administered by the governing country(s)

A "No" indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

16. Other information, including date of preparation or last revision

Issue date 05-12-2015

Revision date 10-28-2016

Version # 03

Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

Revision information

Product and Company Identification: Business Units
Hazard(s) identification: Prevention
Hazard(s) identification: Response
Composition / Information on Ingredients: Ingredients
Composition/information on ingredients: Component information
Exposure controls/personal protection: Hand protection
Exposure controls/personal protection: Respiratory protection
Physical and chemical properties: Oxidizing properties
Physical and chemical properties: Explosive properties
Ecological information: Persistence / degradability
Other information, including date of preparation or last revision: References
Other information, including date of preparation or last revision: Further information