

COOKIE MEAL – BUTLER, KY

TYPICAL ANALYSIS

| | |
|----------------------------|-------------------------------|
| Crude Protein | 10.00% |
| Crude Fat | 10.00% |
| Moisture | 9.00% |
| Ash | 4.00% |
| Crude Fiber | 4.50% |
| Metabolizable Energy (TME) | 1,700 Kcal/lb = 3,745 Kcal/kg |

AMINO ACID PROFILE

| | |
|---------------|-------|
| Aspartic Acid | .74% |
| Threonine | .34% |
| Serine | .50% |
| Glutamic Acid | 2.55% |
| Proline | .53% |
| Glycine | .48% |
| Alanine | .54% |
| Cystine | .18% |
| Valine | .52% |
| Methionine | .15% |
| Isoleucine | .40% |
| Leucine | .81% |
| Tyrosine | .09% |
| Phenylalanine | .46% |
| Histidine | .19% |
| Lysine | .33% |
| Arginine | .47% |
| Tryptophan | .11% |
| Taurine | .01% |

MINERALS

| | |
|-------------|-------|
| Salt | 2.25% |
| Calcium | .31% |
| Phosphorous | .31% |

As Fed Basis Poultry/Swine

Analysis are updated periodically and may vary slightly from previous versions.

Approved plant of:

- Animal Protein Producers Institute (APPI) Code of Practice Voluntary Salmonella Reduction Program
- Food & Drug Administration (FDA) Registered
- Animal & Plant Health Inspection Service (APHIS)
- Hazard & Critical Control Point (HACCP)

sales@bakeryfeeds.com

Transforming bakery residuals
into high energy feed ingredients

 **Bakery Feeds®**

DARLING
INGREDIENTS



Material Safety Data Sheet
Identity: Cookie Meal®

Section I - General Information

Manufacturer's Name:

Bakery Feeds, a Division of Griffin Industries LLC
4221 Alexandria Pike
Cold Spring, KY 41076

Emergency Telephone Number: (859) 472-7363

Telephone Number for Information: (859) 472-7363

Date Prepared: 3/19/07

Signature of Preparer: Thomas L. Dobbs

Section II - Hazardous Ingredients/Identity Information

Hazardous Components - Contains no Hazardous Components as described in the Hazard Communication Standard

Substance - Blended Cereal By-Products CAS Number N/A

Trade Names - Cookie Meal, Bakery By-Product Meal

Chemical Family: Proteinaceous Cereal By-Products

Molecular Formula: N/A Molecular Weight: N/A

Components and Contaminants

Components: Bakery By-Products Percent: 100%

Other Contaminants: None Exposure Limits: N/A

Section III - Physical/Chemical Characteristics

Boiling Point: Decomposes Specific Gravity (H₂O = 1): 0.50 avg.

Vapor Pressure (mm Hg): N/A Melting Point: Decomposes

Vapor Density (Air = 1): N/A Evaporation Rate: 0 (Butyl Acetate = 1)

Solubility in Water: Partly Soluble to Insoluble

Appearance and Odor: Light Tan to Light Yellow, Sweet Odor

Section IV - Fire and Explosion Hazard Data

Flash Point (Method Used): None, Decomposes

Flammable Limits: N/A LEL: N/A UEL: N/A

Extinguishing Media: Type A or B

Special Fire Fighting Procedures: None

Unusual Fire and Explosion Hazards: None

Section V - Reactivity Data

Reactivity: Stable

Conditions to Avoid: None

Incompatibility (Materials to Avoid): None

Hazardous Decomposition or Byproducts: None

Hazardous Polymerization: Will Not Occur

Section VI - Health Hazard Data

Inhalation: N/A

Skin Contact: N/A

Eye Contact: N/A

Ingestion: N/A

Emergency and First Aid Procedures: Wash well.

OSHA Regulated: No

Section VII - Precautions for Safe Handling and Use

Steps to be taken in case material is released or spilled - Sweep up spilled material and dispose of in Sanitary Landfill, or contact Griffin Industries concerning reprocessing.

Waste Disposal Method - Send to Sanitary Landfill or contact Griffin Industries as above.

Precautions To Be Taken in Handling and Storing - None

Other Precautions - None

Section VIII - Control Measures

Respiratory Protection - None

Ventilation - Ventilate bins before entering.

Protective Gloves - Standard

Eye Protection - Standard

Other Protective Clothing or Equipment - Standard

Work/Hygienic Practices - Standard

The information provided is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes.