



SAFETY DATA SHEET

Section 1: Identification

Product Name: AO (*Aspergillus oryzae*)

Manufacturer:

Diamond V

P.O. Box 74570

Cedar Rapids, Iowa 52404

Diamond V and EMERGENCY phone number: (800) 373-7234

Recommended Use of Product: AO is a nutritional feed ingredient which is designed for the further manufacture of feed for all classes of livestock and poultry.

Date: 16 July 2015

Revision: 1

Section 2: Hazard(s) Identification

Classification: In accordance with 29 CFR 1910.1200

Label Elements: *Signal word:* DANGER

Hazard Statement(s): May cause allergy or asthma symptoms or breathing difficulties if inhaled.



Precautionary Statements-Response:

Eyes- If in eyes, rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

Skin- If on skin, gently wash with plenty of soap and water.

Inhalation- If inhaled: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.

Ingestion- If swallowed, rinse mouth. DO NOT induce vomiting. Call a poison Center or doctor/physician if you feel unwell.

Precautionary Statements-Storage

Protect from sunlight. Do not expose to temperatures exceeding 50C / 122F.

Precautionary Statements- Disposal

Dispose of unused product and container in accordance with all applicable local and regional requirements.

Section 3: Composition/Information on Ingredients

Component:

CAS #	Name	Weight Percentage
Not Applicable	Pasteurized Bran	95-99%
9001-19-8	Alpha-amylase (fungal)	<1.0%

The exact percentage (concentration) of composition has been withheld as a trade secret. GHS Classification of Enzymes is based on AEP content. The above figure does not represent total AEP in the product.

Section 4: First Aid Measures

Inhalation: If overcome by high dust concentrations, remove to a ventilated area with fresh air.

Skin Contact: Wash off immediately with soap and plenty of water.

Eye Contact: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

Ingestion: Rinse out mouth with water. Drink plenty of water.

Section 5: Fire-fighting Measures

Suitable Extinguishing Agents: CO₂, dry chemical, alcohol-resistant foam or water spray.

Specific Hazards Arising from the Chemical: May cause allergic respiratory reaction.

Protective Equipment and Precautions for Firefighters: Wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

Section 6: Accidental Release Measures

Person-related Safety Precautions: Ensure adequate ventilation.

Measures for Cleaning/Collecting: Vacuum or sweep material. Transfer to properly labelled containers. Do not use compressed air to avoid dispersal of dust into the air. Avoid splashing and high pressure washing to avoid creating aerosols.

Measures for Environmental Protection: Clean up immediately to avoid formation of dust. Take up by mechanical means preferably by a vacuum cleaner equipped with a high efficiency filter. Flush remainder carefully with plenty of water.

Section 7: Handling and Storage

Store this product in a cool, dry environment. Avoid temperatures above 50C (122F) and freezing temperatures to preserve biological stability. Avoid generating dust during handling. Use local exhaust and ventilation during handling to prevent dust accumulations. Strong acids or alkali compounds and strong oxidizing agents may inactivate biological cultures.

Section 8: Exposure Controls/Personal Protection

Engineering Controls: Ensure adequate ventilation, especially in confined areas. Provide general mechanical and/or local exhaust ventilation to prevent release of dust into work environment.

Personal Protective Equipment:

Eye Protection: Avoid contact with eyes.

Respirator Protection: In case of insufficient ventilation, wear suitable respiratory equipment.

Skin and Body Protection: No special technical protective measures are necessary.

General Hygiene Considerations: Handle in accordance with good industrial hygiene and safety practices.

Section 9: Physical and Chemical Properties

- A.) Appearance: Tan, free-flowing powder
- B.) Odor: Slight fermented odor
- C.) Odor Threshold: Unknown
- D.) pH: Unknown
- E.) Melting point/freezing point: Not Applicable
- F.) Boiling point, boiling range: Not Applicable
- G.) Flash point: Unknown
- H.) Evaporation rate: Not Applicable
- I.) Flammability (solid, gas): Slightly flammable. Will burn. NFPA Rating=1.
- J.) Upper/lower flammability or explosive limits: Unknown
- K.) Vapor pressure: Not Applicable
- L.) Vapor density: Not Applicable
- M.) Relative density: No data available
- N.) Solubility: No data available
- O.) Partition coefficient: n-octanol/water: Unknown
- P.) Auto-ignition temperature: Unknown
- Q.) Decomposition temperature: Unknown
- R.) Viscosity: Unknown

Section 10: Stability and Reactivity

Chemical Stability: Stable under recommended storage conditions.

Conditions to Avoid: Stable under normal conditions. Avoid excessive temperature variations below 32F or above 155F.

Incompatible Materials: Strong acids or alkali compounds and strong oxidizing agents may inactivate biological cultures.

Hazardous Decomposition Products: None

Possibility of Hazardous Reactions: None under normal processing.

Reactivity: No data available.

Section 11: Toxicological Information**Routes of Entry:**

Inhalation: No data available for this product.

Skin: Prolonged or repeated contact may dry skin and cause irritation.

Eyes: Contact with eyes may cause irritation.

Ingestion: May cause stomach discomfort.

Section 12: Ecological Information

This product is not expected to pose any environmental hazard.

Section 13: Disposal Considerations

In accordance with Federal, State and Local regulations

Section 14: Transport Information

Not regulated

Section 15: Regulatory Information

SARA 313-This product does not contain any chemicals which are subject to the reporting requirements of the Act and 40 CFR Part 372.

SARA 311/312 Hazardous Categorization

Acute Health Hazard	No
Chronic Health Hazard	No
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Clean Water Act: This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA: This material does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA) (40 CFR 302) or the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355).

California Proposition 65: This product does not contain any Proposition 65 chemicals.

EPA Pesticide Registration Number: Not applicable

Section 16: Other Information

Feed components generally produce a limited amount of dust in manufacturing and handling of the material. Although reasonable care has been taken in the preparation of this document, we extend no warranties and make no representations as to the accuracy or completeness of the information contained therein, and assume no responsibility regarding the suitability of this information for the user’s intended purpose or for the consequences of its use. Each individual should make a determination as to the suitability of the information for their particular purpose(s). End of SDS.