



## MATERIAL SAFETY DATA SHEET

<b>Identity</b> Diamond V XP-DFM	<b>Chemical Name</b> Yeast Culture plus Direct Fed Microbial Premix
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### Section I – General Information

<b>Manufacturer</b> Diamond V Mills 838 1 <sup>st</sup> Ave NW P.O. Box 74570 Cedar Rapids, IA 52407	<b>Emergency Phone Number</b> (319) 366-0745 (800) 373-7234 (outside Iowa)
	<b>Telephone Number for Information</b> same
	<b>Date Prepared:</b> November 26, 2007

### Section II – Hazard Ingredients/Identity Information

Contains no hazardous components as listed in 29 CFR Parts 1900.1000 or 1910.1200.				
The direct fed microbial premix may contain all or some of the following microbial cultures: <i>Aspergillus niger</i> , <i>Aspergillus oryzae</i> , <i>Bacillus licheniformis</i> , <i>Bacillus subtilis</i> , <i>Enterococcus faecium</i> , <i>Lactobacillus acidophilus</i> , <i>Lactobacillus casei</i> , <i>Lactobacillus lactis</i> , <i>Pediococcus cerevisiae</i> , <i>Propionibacterium freudenreichii</i> , <i>Trichoderma viride</i> . These products are animal feed additives accepted by FDA and considered GRAS for human consumption under 21 CFR 184.1444.				
<b>Common Name</b>	<b>OSHA PEL</b>	<b>ACGIH TLV</b>	<b>Other Limits</b>	<b>% Optional</b>

### Section III - Physical/Chemical Characteristics

<b>Boiling Point</b>	NA	<b>Specific Gravity (H<sub>2</sub>O = 1)</b>	NA
<b>Vapor Pressure (Mmg Hg)</b>	NA	<b>Melting Point</b>	NA
<b>Vapor Density (Air = 1)</b>	NA	<b>Evaporation Rate (Butyl Acetate = 1)</b>	NA
<b>Solubility In Water</b>	NA		
<b>Appearance And Odor</b>	Tan Granular or Powder, Yeast Aroma		

### Section IV - Fire And Explosion Hazard Data

<b>Flash Point (Method Used)</b> NA	<b>Flammable Limits</b> NA	<b>LEL</b>	<b>UEL</b>
<b>Extinguishing Media:</b> Water spray - dry chemical - CO <sub>2</sub>			
<b>Special Fire Fighting Procedures:</b> NA			
<b>Unusual Fire Fighting Procedures:</b> Control dust			

**Section V – Reactivity Data**

Yeast Culture plus Direct Fed Microbial Premix

<b>Stability</b>	<b>Unstable</b>		<b>Conditions to Avoid</b>	NA
	<b>Stable</b>	X		
<b>Incompatibility (Materials To Avoid):</b> Strong oxidizing agents, moisture, high temperatures				
<b>Hazardous Decomposition Or Byproducts:</b> Unknown				
<b>Hazardous Polymerization</b>	<b>May Occur</b>		<b>Conditions to Avoid</b>	NA
	<b>Will Not Occur</b>	X		

**Section VI – Health Hazard Data**

<b>Routs Of Entry:</b>	<b>Inhalation:</b> Yes	<b>Skin:</b> No	<b>Ingestion:</b> Yes
<b>Health Hazards (Acute And Chronic):</b> Individuals with known grain dust allergies or chronic respiratory disease should avoid contact with all dusty conditions.			
<b>Carcinogenicity:</b>	NA	<b>NPT:</b>	NA
<b>OSHA Regulated:</b>		NA	
<b>Signs And Symptoms Of Exposure:</b> Dust may affect allergies or respiratory problems.			
<b>Medical Conditions Generally Aggravated By Exposure:</b> Dust related problems.			
<b>Emergency And Fist Aid Procedures:</b> No special procedures.			

**Section VII – Precautions for Safe Handling and Use**

<b>Steps To Be Taken In Case of Release or Spill:</b> Conventional clean-up.
<b>Waste Disposal Method:</b> Observe all local, state, and federal environmental regulations.
<b>Precautions To Be Taken In Handling And Storing:</b> Store in cool, dry area.
<b>Other Precautions:</b> NA

**Section VIII – Control Measures**

<b>Respiratory Protection (Specify Type):</b> General all-purpose dusk mask if desired.			
<b>Ventilation</b>	<b>Local Exhaust</b>	NA	<b>Special</b> NA
	<b>Mechanical (General)</b>	NA	<b>Other</b> NA
<b>Protective Gloves:</b> NA			
<b>Eye Protection:</b> Safety glasses a good practice			
<b>Hygienic Practices:</b> Good manufacturing practice			