



# MATERIAL SAFETY DATA SHEET

## 1 PRODUCT AND COMPANY IDENTIFICATION

**Product Name:** Empyreal75™

**Synonyms:** Corn protein concentrate

**Manufacturer Name:**  
Cargill, Corn Milling  
650 Industrial Road  
Blair, NE 68008

**Emergency Telephone:**  
1-800-424-9300

**Non-emergency Telephone:**  
1-402-533-4100

**Intended Use:** High purity protein ingredient,  
primarily used in food and animal feed applications

## 2 HAZARDS IDENTIFICATION

### Emergency Overview

**Physical State:** Powder or granules

**Color:** Yellow-gold

**Odor:** Cereal-like

Low hazard for usual industrial or commercial handling by trained personnel.

### Potential Health Effects

**Inhalation:** Dust may irritate throat and respiratory system and cause coughing.

**Eye Contact:** May cause temporary eye irritation.

**Skin Contact:** None known.

**Ingestion:** None known.

**OSHA Regulatory Status:** This product is not hazardous according to OSHA 29CFR 1910.1200.

## 3 COMPOSITION / INFORMATION ON INGREDIENTS

The components are not hazardous or are below required disclosure limits.

Chemical Name	CAS-No.	Concentration*
Corn protein concentrate	not assigned	100%

**4 FIRST AID MEASURES**

**Inhalation:** If symptomatic, move to fresh air. Get medical attention if symptoms persist.

**Eye Contact:** Any material that contacts the eye should be washed out immediately with water. If easy to do, remove contact lenses. Get medical attention promptly if symptoms occur after washing.

**Skin Contact:** Wash skin with soap and water. Get medical attention promptly if symptoms occur after washing.

**Ingestion:** Get medical attention if any discomfort occurs.

**5 FIRE-FIGHTING MEASURES**

**Extinguishing Media:** Extinguish with foam, carbon dioxide, dry powder or water fog.

**Unsuitable Extinguishing Media:** Not applicable.

**Special Fire Fighting Procedures:** Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

**Unusual Fire & Explosion Hazards:** High concentrations of dust may form explosive mixture with air.

**Hazardous Combustion Products:** Carbon Oxides

**6 ACCIDENTAL RELEASE MEASURES**

**Personal Precautions:** Avoid inhalation of high concentrations of dust. In case of inadequate ventilation, use respiratory protection.

**Spill Cleanup Methods:** Sweep or scoop up and remove.

**7 HANDLING AND STORAGE**

**Handling:** No special precautions are necessary beyond normal good hygiene practices. See Section 8 of the MSDS for additional personal protection advice when handling this product. Observe good industrial hygiene practices.

**Storage:** Store away from incompatible materials.

**8 EXPOSURE CONTROLS / PERSONAL PROTECTION**

**Exposure Limits:**

**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.

**Respiratory Protection:** If engineering controls do not maintain airborne concentrations below recommended exposure limits (where applicable) or to an acceptable level (in countries where exposure

limits have not been established), an approved respirator must be worn. In the United States of America, if respirators are used, a program should be instituted to assure compliance with OSHA Standard 63 FR 1152, January 8, 1998. Respirator type: High-efficiency particulate respirator.

**Eye Protection:** Risk of contact: Wear approved safety goggles.

**Hand Protection:** It is a good industrial hygiene practice to minimize skin contact.

**Skin Protection:** Risk of contact: Use skin protection.

**Hygiene Measures:** 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.

**Environmental Exposure Controls:** Environmental manager must be informed of all major spillages.

<b>9</b>	<b>PHYSICAL AND CHEMICAL PROPERTIES</b>
----------	---

**Color:** Yellow-gold

**Odor:** Cereal-like

**Odor Threshold:** No data available.

**Physical State:** Powder or granules

**pH:** 4 - 6

**Melting Point:** No data available.

**Freezing Point:** No data available.

**Boiling Point:** No data available.

**Flash Point:** No data available.

**Evaporation Rate:** No data available.

**Flammability (Solid):** No data available.

**Flammability Limit - Upper (%):** No data available.

**Flammability Limit - Lower (%):** No data available.

**Vapor Pressure:** No data available.

**Vapor Density (Air=1):** No data available.

**Specific Gravity:** 0.6

**Solubility in Water:** Slight < 5 %

**Solubility (Other):** No data available.

**Partition Coefficient (n-Octanol/water):** No data available.

**Autoignition Temperature:** No data available.

**Decomposition Temperature:** No data available.

**Viscosity:** No data available.

**Explosive Properties:** No data available

<b>10</b>	<b>STABILITY AND REACTIVITY</b>
-----------	---------------------------------

**Stability:** Stable.

**Conditions to Avoid:** Avoid dust formation.

**Incompatible Materials:** Strong oxidizing agents.

**Hazardous Decomposition Products:** None.

**11 TOXICOLOGICAL INFORMATION**

**Listed Carcinogens:** None.

**Product Information**

**Acute Toxicity:**

**Test Results**

No test data available for the product.

**Other Acute:** No additional adverse health effects noted.

**Chronic Toxicity:** None known.

**12 ECOLOGICAL INFORMATION**

**Ecotoxicity:** No data available.

**Mobility:** No data available.

**Persistence and Degradability:** No data available.

**Bioaccumulation Potential:** No data available.

**13 DISPOSAL CONSIDERATIONS**

**General Information:** Dispose of waste and residues in accordance with local authority requirements.

**Disposal Methods:** No specific disposal method required.

**Container:** Since emptied containers retain product residue, follow label warnings even after container is emptied.

**14 TRANSPORT INFORMATION**

**DOT** Not regulated.

**TDG** Not regulated.

**IATA** Not regulated.

**IMDG** Not regulated.

**15 REGULATORY INFORMATION**

**Canadian Controlled Products Regulations:** This product has been classified according to the hazard criteria of the Canadian Controlled Products Regulations, Section 33, and the MSDS contains all required information.

**WHMIS Classification:** This is not a WHMIS controlled product.

**Mexican Dangerous Statement:** This product is not dangerous according to Mexican regulations.

### Inventory Status

**This product or all components are listed or exempt from listing on the following inventory:** DSL, TSCA

### US Regulations

**CERCLA Hazardous Substance List (40 CFR 302.4):** Not regulated.

### SARA Title III

**Section 302 Extremely Hazardous Substances (40 CFR 355, Appendix A):** Not regulated.

### **Section 311/312 (40 CFR 370):**

Acute (Immediate)     Chronic (Delayed)     Fire     Reactive     Pressure Generating

**Section 313 Toxic Release Inventory (40 CFR 372):** Not regulated.

**Clean Air Act (CAA) Section 112(r) Accidental Release Prevention (40 CFR 68.130):**  
Not regulated.

**Clean Water Act Section 311 Hazardous Substances (40 CFR 117.3):** Not regulated.

**Drug Enforcement Act:** Not regulated.

### TSCA

**TSCA Section 4(a) Final Test Rules & Testing Consent Orders:** Not regulated.

**TSCA Section 5(a)(2) Final Significant New Use Rules (SNURs) (40CFR 721, Subpt. E):** Not regulated.

**TSCA Section 5(e) PMN-Substance Consent Orders:** Not regulated.

**TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D):** Not regulated.

### State Regulations

**California Safe Drinking Water and Toxic Enforcement Act of 1986 (Proposition 65):** Not regulated.

**Massachusetts Right-To-Know List:** Not regulated.

**Michigan Critical Materials List (Michigan Natural Resources and Environmental Protection Act (Act. 451 of 1994)):** Not regulated.

**Minnesota Hazardous Substances List:** Not regulated.

**New Jersey Right-To-Know List:** Not regulated.

**Pennsylvania Right-To-Know List:** Not regulated.

**Rhode Island Right-To-Know List:** Not regulated.

<b>16</b>	<b>OTHER INFORMATION</b>
-----------	--------------------------

**HAZARD RATINGS**

	<b>Health Hazard</b>	<b>Fire Hazard</b>	<b>Instability</b>	<b>Special Hazard</b>
<b>NFPA</b>	0	1	0	NONE

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe

NFPA Label colored diamond code: Blue - Health; Red - Flammability; Yellow - Instability; White - Special Hazards

	<b>Health Hazard</b>	<b>Flammability</b>	<b>Physical Hazard</b>	<b>Personal Protection</b>
<b>HMIS</b>	0	1	0	--

Hazard rating: 0 - Minimal; 1 - Slight; 2 - Moderate; 3 - Serious; 4 - Severe

HMIS Label colored bar code: Blue - Health; Red - Flammability; Orange - Physical Hazards; White - Special

**Issue Date:** 27-Dec-2007

**Supersedes Date:** New

**SDS No.:** 1008966

**Disclaimer:** This information is provided without warranty. The information is believed to be correct. This information should be used to make an independent determination of the methods to safeguard workers and the environment.