

SAFETY DATA SHEET

Corn Dextrin[®]

Version #1 Issue date: October 1, 2014

1. Identification

Product Identifier: Corn Dextrin
Recommended use: Thickener, stabilizer, binder or emulsifier in food applications
Recommended restrictions: None known
Supplied by: PRO Chemical & Dye
126 Shove Street
Fall River, MA 02724

Emergency Telephone Numbers:
800-255-3924 ChemTel. (United States)
+ 1 01 813-248-0585 (Outside the United States)

2. Hazard(s) Identification

Physical hazards: Not classified.
Healthy hazards: Not classified.
OSHA defined hazards: Combustible dust
Label elements
Hazard symbol: None
Signal word: Warning
Hazard statement: May form combustible dust concentrations in air.
Precautionary statement
Prevention: Keep away from heat/sparks/open flames/hot surfaces. – No smoking. Keep container tightly closed. Ground/bond container and receiving equipment. Prevent dust accumulation to minimize explosion hazard.
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: Not applicable.

3. Composition/information on ingredients

Mixtures

<u>Chemical name</u>	<u>CAS number</u>	<u>%</u>
Dextrin	9004-53-9	100

Composition comments: This product contains <10ppm sulfur dioxide. Allergen labeling not required according to 21 CFR section 101.100 of the US FDA.
All concentrations are in percent by weight unless otherwise indicated.

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 attentions if irritation develops and persists.
Ingestion	Rinse mouth. Get medical attention if symptoms occur.
Most important symptoms/effects, acute and delayed	Direct contact with eyes any cause temporary irritation.
Indication of immediate medical attention and special treatment needed	Provide general supportive measures and 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). Apply extinguishing media carefully to avoid creating airborne dust.
Unsuitable extinguishing Media	None known.
Specific hazards arising from The chemical	Dust may form explosive mixture with air. Avoid generating dust, fine dust disappeared in air in sufficient concentrations, and in the presence of an ignition is a potential dust explosion.
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	In the event of fire, cool tanks with water spray.
Specific methods	Cool containers exposed to flames with water until well after the fire is out.
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. Keep people away from and upwind of spill/leak. Dust deposits should not be allowed to accumulate on surfaces, as these may form an explosive mixture if they are released into the atmosphere in sufficient concentration. Wear appropriate personal protective equipment. Use only non-sparking tools. Ensure adequate ventilation. Local authorities should be advised if significant spillage cannot be contained.
Methods and materials for Containment and cleaning up	Large Spills: Stop the flow of material, if this is without risk. Dike the spilled material, where this is possible. Absorb in vermiculite, dry sand or earth and place in containers. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). Following product recovery, flush area with water.
Environmental precautions	Avoid discharge into drains, water courses or into the ground.

7. Handling and storage

Precautions for safe handling Use with adequate ventilation. Eliminate all sources of ignition. Minimize dust generation and accumulation. Combustible dust clouds may be created where operations produce fine material (dust). Avoid significant deposits of material, especially on horizontal surfaces, which may become airborne and form combustible dust clouds and may contribute to secondary explosions. Handling and processing operations should be conducted in accordance with “best practices” (e.g. NFPA_654). Provide adequate ventilation. Wear appropriate personal protective equipment. Observe good industrial hygiene practices. Avoid direct contact with eyes.

Conditions for safe storage, including any incompatibilities Keep away from heat, sparks and open flame. Dry powders build static electricity charges when subjected to the friction of transfer and mixing operations. Provide adequate precautions, such as electrical grounding and bonding, or inert atmospheres. Keep container tightly closed. Store in a cool, dry place out of direct sunlight. Store in a well-ventilated place. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces.

8. Exposure controls/personal protection

Occupational exposure limits No exposure limits noted for ingredients(s)

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. It is recommended that all dust control equipment such as local exhaust ventilation and material transport systems involved in handling of this product contain explosion relief vents or an explosion suppression system or an oxygen-deficient environment. Ensure that dust-handling systems (such as exhaust ducts, dust collectors, vessels, and processing equipment) are designed in a manner to prevent the escape of dust into the work area (i.e., there is no leakage from the equipment). Use only appropriately classified electrical equipment and powered industrial trucks.

9. Physical and chemical properties

Appearance

Physical state	Solid
Form	Powder
Color	White to off white

Odor Odorless

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
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	Not available
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	
Dust explosion properties	
Pmax	9.5 bar
Kst	195 bar.m/s
St class	1 Weak explosion (St 1)
Minimum ignition Energy (MIE)-dust cloud	>30mJ (normal moisture level)
pH in aqueous solution	2.8 – 4.5

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	Keep away from heat, sparks, and open flames. Minimize dust generation and accumulation, Contact with incompatible materials. Humidity.
Incompatible materials	Strong oxidizing agents
Hazardous decomposition products	Carbon dioxides

11. Toxicological information

Information on likely routes of exposure	
Inhalation	No adverse effects due to inhalation are expected

Skin contact	May cause skin irritation
Eye contact	May cause eye irritation
Ingestion	Ingestion may cause irritation and malaise
Symptoms related to the physical, chemical and toxicological characteristics	Irritant effects
Information on toxicological effects	
Acute toxicity	Not available
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	No data available
Skin sensitization	No data available
Germ cell mutagenicity	No data available to indicate product or any components present of greater than 0.1% are mutagenic or genotoxic
Carcinogenicity	This product is not considered to be a carcinogen by IARC, ACGIH, NTP, or OSHA
OSHA Specifically Regulated Substances (29 CFR 1910,1001-1050)	Not listed
Reproductive toxicity	No data available
Specific target organ toxicity-single exposure	No data available
Specific target organ toxicity-repeated exposure	No data available
Aspiration hazard	No data available

12. Ecological information

Ecotoxicity	Not expected to be harmful to aquatic organisms
Persistence and degradability	No data is available on the degradability of this product
Bioaccumulative potential	No data available for this product
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 disperse in sealed containers at licensed waste disposal site. This material and its container must be disposed of as hazardous waste. Do not allow this material to go down the drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container.
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	Dispose of contents/container in accordance with local/regional/national/international 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	Empty containers should be taken to an approved waste handling site for recycling or disposal. Since emptied containers may retain product residue, follow label warnings even after container is emptied.

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 established

15. Regulatory information

US federal regulations	This product is hazardous according to OSHA 29 CFR 1910.1200 due to the potential for dust explosion
TSCA Section 12(b) Export Notification (40 CFR 707, Subpt. D)	Not regulated.
OSHA Specifically Regulated Substances (29 CFR 1910.1001-1050)	Not listed
CERCLA Hazardous Substance List (40 CFR 302.4)	Not listed.
Superfund Amendments and Reauthorization Act of 1986 (SARA)	
Hazard categories	Immediate Hazard – No Delayed Hazard – No Fire Hazard – Yes Pressure Hazard – No Reactivity Hazard – No
SARA 302 Extremely hazardous substance	Not listed
SARA 311/312 Hazardous chemical	Yes
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 (SWDA)
 Not regulated
 Food and Drug Administration (FDA) Total food additive
 Direct food additive
 GRAS food additive

US State regulation This product does not contain a chemical known to the State of California to cause cancer, birth defects or other reproductive harm.

US. Massachusetts RTK – Substance List
 Not regulated.

US. New Jersey Worker and Community Right to Know Act
 Not listed.

US. Pennsylvania Worker and Community Right to Know Act
 Not listed.

US. Rhode Island RTK
 Not regulated.

US. California Proposition 65
 US – California Proposition 65 – Carcinogens & Reproductive Toxicity (CRT): Listed Substance
 Not listed.

International Inventories

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

a "Yes" indicates this product complies 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 by the governing country

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

Issue date: October 1, 2014

Revision date: -

Version #: 01

Further information Refer to NFPA 654, Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids, for safe handling.

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