

126 Shove Street - Fall River, MA 02724 orders - 1-800-2-BUY-DYE technical support - 508-676-3838 email - promail@prochemical.com www.prochemical.com

SAFETY DATA SHEET CORN DEXTRIN

1. Identification

Product Identifier: Corn Dextrin

Recommended use: Thickener, stabilizer, binder or emulsifier in food applications.

Recommended restrictions : None known

Supplier/Distributor information

Company Name PRO Chemical & Dye
Address 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.
Health 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

 Chemical name
 CAS number
 %

 Dextrin
 9004-53-9
 100

Composition comments This product contains <10 ppm 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.

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 attention if irritation develops and persists.

Ingestion Rinse mouth. Get medical attention if symptoms occur. Most important Direct contact with eyes may cause temporary irritation.

None known.

hazard.

symptoms/effects, acute and

delayed

Indication of Immediate medical attention and special treatment needed

General Information

Provide general supportive measures and treat symptomatically.

Ensure that medical personnel are aware of the material(s) involved, and take precautions to protect themselves.

Water fog. Foam. Dry chemical powder. Carbon dioxide (C02). Apply extinguishing media

Dust may form explosive mixture with air. Avoid generating dust; fine dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion

Self-contained breathing apparatus and fun protective clothing must be worn in case of fire.

5. Fire Fighting measures

Suitable extinguishing media

Unsuitable extinguishing

media

Specific hazards arising from the chemical

Special protective equipment and precautions for firefighters

Fire fighting

equipment instructions

Specific methods General fire hazards

In the event of fire, cool tanks with water spray.

carefully to avoid creating airborne dust.

Cool containers exposed to flames with water until well after the fire is out.

No unusual fire or explosion hazards noted.

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 spillages 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 into containers. Avoid dispersal of dust in the air (i.e., clearing dust surfaces with compressed air). Following product recovery, flush area with water.

Small Spills: wipe up with absorbent material (e.g. cloth, fleece). Clean surface thoroughly to remove residual contamination.'

Environmental precautions Avoid discharge into drains, water courses or onto 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 can 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 ingredient(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.

Individual protection measures, such as personal protective equipment

Eye/face protection Not normally needed. If contact is likely, safety glasses with side shields are recommended.

Skin protection

Hand protection Gloves are not required. Gloves are recommended for prolonged use.

Other Wear suitable protective clothing.

Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment,

Wear appropriate thermal protective clothing, when necessary. Thermal hazards

General hygiene

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 considerations

equipment to remove contaminants.

9. Physical and chemical properties

Appearance

Solid. Physical state Powder. Form

White to off white. Color

Odorless. Odor Not available. Odor threshold рΗ Not available. Melting point/freezing point Not available. Initial boiling point and boiling Not available. range

Flash point

Not available. Evaporation rate Not available. Flammability (solid, gas) Combustible dust.

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(les)

Solubility (water)

Not available. Partition coefficient Not available. (n-octanol/water)

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 > 3D mJ (normal moisture level)

cloud

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

Chemical stability transport.

Possibility of hazardous

Material is stable under normal conditions.

reactions

No dangerous reaction known under conditions of normal use.

Conditions to avoid Keep away from heat, sparks and open flame. Minimize dust generation and accumulation.

Contact with incompatible materials. Humidity.

Incompatible materials

Hazardous decomposition

Strong oxidizing agents.

products

Carbon oxides.

11. Toxicological information

Information on likely routes of exposure

Inhalation No adverse effects due to inhalation are expected.

May cause skin irritation. Skin contact Eye contact May cause eye irritation.

Ingestion Ingestion may cause irritation and malaise. Irritant effects.

Symptoms related to the physical, chemical and toxicological characteristics

Information on toxicological effects

Not available. Acute toxicity

Skin corrosion/irritation Prolonged skin contact may cause temporary irritation. Serious eye damage/eye Direct contact with ayes may cause temporary irritation.

Irritation

Respiratory or skin sensitization

Respiratory sensitization No data available. No data available. Skin sensitization

No data available to indicate product or any components present at greater than 0.1 are Germ cell mutagenicity

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 Specific target organ toxicity •

No data available. No data available.

single exposure

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 8011 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

Collect and reclaim or dispose in sealed containers at licensed waste disposal site. This material Disposal instructions

and its container must be disposed of as hazardous waste. Do not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterways or ditches with chemical or used container. Dispose of contents/container In accordance with local/regional/national/international

regulations.

The waste code should be assigned in discussion between the user, the producer and the waste Hazardous waste code

disposal company.

Waste from residues I 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).

Empty containers should be taken to an approved waste handling site for recycling or disposal. Contaminated packaging

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

15. Regulatory information

US federal regulations This product is hazardous according to OSHA 29 CFR 1910.1200 due to the potential for dust

explosion.

Not established.

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 Yes

chemical

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

Not regulated.

(SDWA)

Food and Drug Total food additive Direct food additive Administration (FDA)

GRAS food additive

US state regulations

This product does not contain a chemical known to the State of California to cause cancer, birth detects 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 Law

Not fisted.

US; Rhode Island RTK

Not regulated.

US. California Proposition 65

US - California Proposition 65 - Carcinogens & Reproductive Toxicity (CRT): Listed substance

Not listed.

International Inventories

Inventory name Country(s) or region On inventory (yes/no)* Australia Australian Inventory of Chemical Substances (AICS) Yes Domestic Substances List (DSL) Canada Yes Non-Domestic Substances List (NDSL) Canada No Inventory of Existing Chemical Substances in China (IECSC) China Yes European Inventory of Existing Commercial Chemical Yes Europe

Substances (EINECS)

European List of Notified Chemical Substances (EUNCS) No Europe Inventory of Existing and New Chemical Substances (ENCS) No Japan Existing Chemicals List (ECI) Yes Korea New Zealand Inventory Yes New Zealand Yes Philippine Inventory of Chemicals and Chemical Substances

(PICCS)

United states & Puerto Rico

Yes Toxic Substances Control Act (TSCA) Inventory

A "No indicates that one or more components of the product are not listed or exempt from listing on the inventory administered by the governing country(s).

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

01-0ctober-2014 Issue date

Revision date

Philippines

01 Version #

Refer to NFPA 654, Standard for the Prevention of Fire and Dust Explosions from the Further information

Manufacturing, Processing, and Handling of Combustible Particulate Solids, for safe handling.

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for fraudulent misrepresentation.

^{*}A "Yes- indicates this product complies with the Inventory requirements administered by the governing COUI1try(S).