Safety Data Sheet

Issue Date: 09-Jun-2016 **Revision Date:** 18-Dec-2017 **Version** 1

1. IDENTIFICATION

Product Identifier
Product Name Argo Corn Starch Food Grade

Other means of identification
SDS # ACH-002

Recommended use of the chemical and restrictions on use
Recommended Use Manufacture of food products.

Details of the supplier of the safety data sheet
Supplier Address
ACH Food Companies, Inc.
1 Parkview Plaza, Suite 500
Oakbrook Terrace, IL 60181

Emergency Telephone Number
Company Phone Number General Assistance 1-866-462-9652
Emergency Telephone (24 hr) INFOTRAC 1-352-323-3500 (International)
1-800-535-5053 (North America)

2. HAZARDS IDENTIFICATION

Appearance White powder **Physical state** Solid **Odor** No detectable odor

Classification

Combustible Dust

Signal Word
Warning

Hazard statements
May form combustible dust concentrations in air

3. COMPOSITION/INFORMATION ON INGREDIENTS

Chemical Name	CAS No.	Weight-%
Corn Starch	9005-25-8	100

If Chemical Name/CAS No is "proprietary" and/or Weight-% is listed as a range, the specific chemical identity and/or percentage of composition has been withheld as a trade secret.

4. FIRST AID MEASURES

First Aid Measures

General Advice Provide this SDS to medical personnel for treatment.

Eye Contact	Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If eye irritation persists: Get medical advice/attention.
Skin Contact	Take off immediately all contaminated clothing. Wash off immediately with soap and plenty of water. If skin irritation occurs: Get medical advice/attention.
Inhalation	Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get medical attention if symptoms persist.
Ingestion	If a large amount is swallowed, get medical attention.

Most important symptoms and effects

Symptoms	None expected.

Indication of any immediate medical attention and special treatment needed

Notes to Physician	Treat symptomatically.

5. FIRE-FIGHTING MEASURES

Suitable Extinguishing Media
Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Carbon dioxide (CO2). Water spray (fog). Foam.

Unsuitable Extinguishing Media Not determined.

Specific Hazards Arising from the Chemical
Dust can form an explosive mixture with air This material can be ignited by heat, sparks, flames, or other sources of ignition (e.g., static electricity, pilot lights, mechanical/electrical equipment, and electronic devices such as cell phones, computers, calculators, and pagers which have not been certified as intrinsically safe). Use explosion-proof electrical equipment. Contact with combustible material may cause fire.

Explosion Data

Sensitivity to Static Discharge	AVOID GENERATING DUST. Fine dust dispersed in air, in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion hazard.

Protective equipment and precautions for firefighters
As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures

Personal Precautions	Wear protective clothing as described in Section 8 of this safety data sheet.

Environmental precautions

Environmental precautions	See Section 12 for additional Ecological Information.

Methods and material for containment and cleaning up

Methods for Containment	Prevent further leakage or spillage if safe to do so.
Methods for Clean-Up	Carefully sweep, scoop or vacuum and place in suitable container. Avoid generating dust or accumulating dust. Avoid dust dispersal in the air (i.e. cleaning dust surfaces with compressed air). If possible, complete cleanup on a dry basis. Spilled material can be a

slipping hazard. Eliminate flames, sparks, excessive temperatures and oxidizing agents. Non-sparking tools should be used.

7. HANDLING AND STORAGE

Precautions for safe handling

Advice on Safe Handling Handle in accordance with good industrial hygiene and safety practice. Use only in well-ventilated areas. Avoid generation of dust. Avoid breathing dusts. Avoid contact with skin and eyes. Minimize dust generation and accumulation. Ensure that dust does not accumulate on surfaces. Keep away from heat/sparks/open flames/hot surfaces. — No smoking.

Conditions for safe storage, including any incompatibilities

Storage Conditions Store in closed, properly labeled containers in a cool, ventilated area. Do not transfer contents to bottles or other unlabeled containers. Keep away from heat, open flames and oxidizing agents.

Incompatible Materials Oxidizing agents.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Exposure Guidelines

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Corn Starch 9005-25-8	TWA: 10 mg/m^3	TWA: 15 mg/m^3 total dust TWA: 5 mg/m^3 respirable fraction (vacated) TWA: 15 mg/m^3 total dust (vacated) TWA: 5 mg/m^3 respirable fraction	TWA: 10 mg/m^3 total dust TWA: 5 mg/m^3 respirable dust

Appropriate engineering controls

Engineering Controls Explosion-proof general and local exhaust ventilation. Use explosion proof electrical equipment for very high dust levels. Ensure ventilation and dust-handling systems prevent the escape of dust into work areas and there is no leakage from equipment.

Individual protection measures, such as personal protective equipment

Eye/Face Protection If contact is likely, safety glasses with side shields are recommended. Refer to 29 CFR 1910.133 for eye and face protection regulations.

Skin and Body Protection No protective equipment is needed under normal use conditions.

Respiratory Protection Nuisance dust mask 3M type 8710 or equivalent. Refer to 29 CFR 1910.134 for respiratory protection requirements.

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

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Physical state	Solid		
Appearance	White powder	**Odor**	No detectable odor
Color	White	**Odor Threshold**	Not determined

Property	Values	Remarks • Method

pH	4.8-5.8
Melting Point/Freezing Point	Not determined
Boiling Point/Boiling Range	Not determined
Flash Point	Not determined
Evaporation Rate	Not determined
Flammability (Solid, Gas)	Not determined
Flammability Limits in Air	
Upper Flammability Limits	Not determined
Lower Flammability Limit	Not determined
Vapor Pressure	Not determined
Vapor Density	Not determined
Relative Density	~0.64 g/cc
Water Solubility	Not soluble
Solubility in other solvents	Not determined
Partition Coefficient	Not determined
Auto-ignition Temperature	Not determined
Decomposition Temperature	Not determined
Kinematic Viscosity	Not determined
Dynamic Viscosity	Not determined
Explosive Properties	May form explosive mixtures with air
Oxidizing Properties	Not determined

Other Information

Material Dust Explosivity Parameters: KSt-value (bar x m/s): 199. Maximum explosion pressure (Pmax)bar: 8.2. Maximum rate of pressure rise ((dp/dt)max) bar/s: 733. Testing in accordance with American Society of Testing Materials (ASTM E1226). This data provides a relative measure of deflagration characteristics used for design of explosion protection systems. Refer to NFPA 654, 68, and 69 for guidance on explosion mitigation.

10. STABILITY AND REACTIVITY

Reactivity
Not reactive under normal conditions.

Chemical Stability
Stable under recommended storage conditions.

Possibility of Hazardous Reactions
None under normal processing.

Hazardous Polymerization Hazardous polymerization does not occur.

Conditions to Avoid
Dust formation. Avoid all possible sources of ignition.

Incompatible Materials
Oxidizing agents.

Hazardous Decomposition Products
Smoke, fumes or vapors, and oxides of carbon.

11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Product Information

Eye Contact May cause mechanical eye irritation.

Skin Contact Avoid contact with skin.

Inhalation May cause irritation of respiratory tract.

Ingestion Do not ingest.

Component Information

Information on physical, chemical and toxicological effects

Symptoms Please see section 4 of this SDS for symptoms.

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Carcinogenicity Based on the information provided, this product does not contain any carcinogens or potential carcinogens as listed by OSHA, IARC or NTP.

12. ECOLOGICAL INFORMATION

Ecotoxicity
The product is not classified as environmentally hazardous. However, this does not exclude the possibility that large or frequent spills can have a harmful or damaging effect on the environment.

Persistence/Degradability
Not determined.

Bioaccumulation
Not determined.

Mobility
Not determined

Other Adverse Effects
Not determined

13. DISPOSAL CONSIDERATIONS

Waste Treatment Methods

Disposal of Wastes Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated Packaging Disposal should be in accordance with applicable regional, national and local laws and regulations.

14. TRANSPORT INFORMATION

Note Please see current shipping paper for most up to date shipping information, including exemptions and special circumstances.

DOT Not regulated

IATA Not regulated

IMDG Not regulated

15. REGULATORY INFORMATION

International Inventories

Chemical Name	TSCA	DSL/NDSL	EINECS/ELINCS	ENCS	IECSC	KECL	PICCS	AICS
Corn Starch	X	X	X	Present	X	Present	X	X

Legend:

TSCA *- United States Toxic Substances Control Act Section 8(b) Inventory*

DSL/NDSL *- Canadian Domestic Substances List/Non-Domestic Substances List*

EINECS/ELINCS *- European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances*

ENCS *- Japan Existing and New Chemical Substances*

IECSC *- China Inventory of Existing Chemical Substances*

KECL *- Korean Existing and Evaluated Chemical Substances*

PICCS *- Philippines Inventory of Chemicals and Chemical Substances*

AICS *- Australian Inventory of Chemical Substances*

US Federal Regulations

CERCLA

This material, as supplied, 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).

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372

CWA (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)

US State Regulations

California Proposition 65

This product does not contain any Proposition 65 chemicals.

U.S. State Right-to-Know Regulations

Chemical Name	New Jersey	Massachusetts	Pennsylvania
Corn Starch 9005-25-8		X	X

16. OTHER INFORMATION

Additional Product Information PRODUCT IS FOOD GRADE AND IS MANUFACTURED UNDER UNITED STATES FOOD AND DRUG ADMINISTRATION REGULATIONS.

NFPA	**Health Hazards**	**Flammability**	**Instability**	**Special Hazards**
	Not determined	Not determined	Not determined	Not determined
HMIS	**Health Hazards**	**Flammability**	**Physical hazards**	**Personal Protection**
	Not determined	Not determined	Not determined	Not determined

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Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials or in any process, unless specified in the text.

End of Safety Data Sheet