Issue Date: 01/22/2014

Reviewed Date: 01/03/2019

1. Company and Product Identification

1.1 Product Identifier

Clabber Girl Corn Starch / **FIRST STREET**

1.2 Details of the Supplier of the Safety Data Sheet (SDS)

Clabber Girl Corporation
900 Wabash Ave.
Terre Haute, IN 47808
1-812-232-9446 (USA)

1.3 Emergency Telephone Number

Chemtrec: 1-800-424-9300 or 1-703-527-3887 (collect calls accepted)

1.4 Recommended Use

To be used as a food additive, Leavening Agent, Processing Aid

2. Hazards Identification

Corn Starch:

Physical Hazards:	**Not classified**
Health Hazards:	**Not classified**
OSHA Defined Hazards:	**Combustible Dust – Classification not possible**
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.**
Hazards not otherwise Classified:	**None known**

3. Information on Ingredients

Corn Starch

CAS Number:	**9005-25-8**
Chemical Name:	**Starch**
Synonyms:	**Corn Starch; Maize Starch**

4. First Aid Measures

	Eye Contact	Skin Contact	Inhalation	Ingestion
Corn Starch	Rinse well with water. If symptoms develop, obtain medical attention.	Wash with soap and water. Get medical attention if symptoms persist.	If symptomatic, move to fresh air. Get medical attention if symptoms persist.	Rinse mouth. Get medical attention if symptoms occur. Ensure that medical personnel are aware of the material involved and take precautions to protect themselves.

5. Fire-Fighting Measures

Corn Starch:

Extinguishing Media:	**Water fog, foam, dry chemical powder, carbon dioxide. Apply extinguishing media carefully to avoid creating airborne dust.**
Unsuitable Extinguishing Media:	**None known**
Protective Equipment:	**Self-contained breathing apparatus and full protective clothing must be worn in case of fire.**
Firefighting Instructions:	**In the event of fire, cool tanks with water spray.**
Unusual Fire and Explosive Hazards:	**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 hazard.**
Specific Methods:	**Cool containers exposed to flames with water until well after the fire is out.**
Fire and Explosion Hazard:	**No unusual fire or explosion hazards noted.**

6. Accidental Release Measures

Corn Starch:

Personal Precautions:	**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.**
Spill Cleanup Methods:	
Small spills:	**Wipe up with absorbent material (e.g. cloth, fleece). Clean surfaces thoroughly to remove residual contamination.**
For large spills:	**Stop the flow of material, if this is without risk. Dike 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.
Environmental Precautions:	**Avoid discharge into drains, water courses or onto the ground.**

7. Handling and Storage

Corn Starch:

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). Wear appropriate personal protective equipment. Observe good industrial hygiene practices. Avoid direct contact with eyes.**
Storage:	**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 well-ventilated place. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces.**

8. Exposure Control/Personal Protection

Corn Starch:

Biological Limit Values:	**No biological exposure limits noted for the ingredients.**
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 concentrations 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 not leakage from the equipment). Use only appropriately classified electrical equipment and powered industrial trucks.**
Personal Protective Equipment:	
Respiratory Protection:	**In case of insufficient ventilation, wear suitable respiratory equipment.**
Eye Protection:	**Not normally needed. If contact is likely, safety glasses with side shields are recommended.**
Skin Protection:	**Gloves are not required. Gloves are recommended for prolonged use. Wear suitable protective clothing.**
Thermal Hazards:	**Wear appropriate thermal protective clothing, when necessary.**
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.**

US OSHA Table Z-1 Limits for Air Contaminants (29 CFR 1910.1000)			
Chemical Name	**Type**	**Value**	**Form**
Corn Starch (CAS Mixture)	PEL	5 mg/m3	Respirable Fraction
		15 mg/m3	Total Dust
Corn Starch (CAS 9005-25-8)	PEL	5 mg/m3	Respirable Fraction
		15 mg/m3	Total Dust
US ACGIH Threshold Limit Values			
Corn Starch (CAS Mixture)	TWA	10 mg/m3	-
Corn Starch (CAS 9005-25-8)		10 mg/m3	-
US NIOSH: Pocket Guide to Chemical Hazards			
Corn Starch (CAS Mixture)	TWA	5 mg/m3	Respirable
		10 mg/m3	Total
Corn Starch (CAS 9005-25-8)	TWA	5 mg/m3	Respirable
		10 mg/m3	Total

9. Physical and Chemical Properties

	Corn Starch
Appearance:	White to Off White powder
Odor:	Odorless
Odor Threshold:	NA
Physical state:	Not Available
pH as is:	NA
pH (1% SOLN. w/v):	4.0-8.5
Vapor Pressure:	Not Available
Vapor Density:	Not Available
Boiling Point:	Not Available
Flash Point:	Not Available
Auto-Ignition Temperature	Not Available
Flammability:	Combustible Dust
Upper/Lower flammability/explosive Limits:	Not Available
Freezing/Melting Point:	Not Available
Evaporations Rate:	Not Available
Decomposition Temperature:	Not Available
Viscosity:	Not Available
Solubility in Water:	Not Available
Partition coefficient: n-octanol / water:	Not Available
Bulk Density (lb./Ft3):	Not Available
Relative Density:	Not Available

% Volatile:	Not Available

10. Stability and Reactivity

Corn Starch:

Reactivity: **Product is stable and non-reactive under normal conditions of use, storage and transport.**

Stability: **Material is stable under normal conditions.**

Hazardous 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: **Strong Oxidizing Agents**

Hazardous Decomposition: **Carbon Oxides**

11. Toxicological Information

Corn Starch:

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: **May cause irritation and malaise.**

Symptoms Related to the Physical, Chemical and Toxicological Characteristics: **Irritant Effects**

GHS Properties	***Classification***
Acute Toxicity	Not Available
Aspiration Hazard	No data available
Carcinogenicity	Not classified
Germ Cell Mutagenicity	No data available to indicate any components present at >0.1% are mutagenic or genotoxic.
Skin Corrosion / Irritation	Prolonged contact may cause temporary irritation
Skin Sensitization	No data available

STOT-RE	No data available
STOT-SE	No data available
Toxicity for Reproduction	No data available
Respiratory Sensitization	No data available
Serious Eye Damage / Irritation	Direct contact with eyes may cause temporary irritation.

12. Ecological Information

Corn Starch:

Ecotoxicity: **Not expected to be harmful to aquatic organisms.**

Persistence/Degradability: **No data available on the degradability of this product.**

Bioaccumulation of 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

Corn Starch:

Disposal Instruction: **Collect and reclaim or dispose in sealed containers at licensed waste disposal site. This material and its container must be disposed of as hazardous waste. To not allow this material to drain into sewers/water supplies. Do not contaminate ponds, waterway or ditches with chemical or used container. 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. Transportation Information:

Corn Starch:

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

Corn Starch:

US Federal Regulations:	**This product is hazardous according to OSHA 29 CFR 1910.1200 due to the potential for dust explosion.**
TSCA Export Notification:	**Not Regulated**
OSHA Regulated Substances:	**Not Listed**
CERCLA Hazardous Substances:	**Not Listed**
SARA Hazard Categories:	**Immediate Hazard - No** **Delayed Hazard – No** **Fire Hazard – No** **Pressure Hazard – No** **Reactivity Hazard – No**
SARA 302 Extremely Hazardous Substances:	**Not Listed**
SARA 311/312 Hazardous Chemical:	**Yes**

Other Federal Regulations:

Clean Air Act HAPs List: **Not Regulated**

Clean Air Act Accidental Release Prevention: **Not Regulated**

Safe Drinking Water Act: **Not Regulated**

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

Massachusetts RTK – Substance List:
Corn Starch (CAS 9005-25-8)

New Jersey Worker and Community Right-to-Know Law
Not Listed

Pennsylvania Worker and Community Right-to-Know Law
Corn Starch (CAS 9005-25-8)

Rhode Island RTK
Not Regulated

California Proposition 65 – CRT Listed Substance:
Not Listed

Inventory						
Component	**CAS**	**Australia AICS**	**Canada DSL**	**Canada NDSL**	**China IECSC**	**EU EINECS**
Corn Starch	**9005-25-8**	**Yes**	**Yes**	**No**	**Yes**	**Yes**

Inventory							
Component	**CAS**	**EU ELNICS**	**Japan ENCS**	**Korea ECL**	**New Zealand**	**Philippines PICCS**	**United States & Puerto Rico TSCA**
Corn Starch	**9005-25-8**	**No**	**No**	**Yes**	**Yes**	**Yes**	**Yes**

16. Other Information

Reviewed January 3, 2019 – Clabber Girl Research and Development

Revised March 20, 2015 – Clabber Girl Research and Development - Updated format to match new SDS standards. Updated with new information from supplier's SDS.

Revised November 4, 2013 – Clabber Girl Research and Development - Removed Halal reference from Corn Starch section 15.
Format Revision June 1, 2009 – Clabber Girl Research and Development

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