

Material Safety Data Sheet

CORNSTARCH

1. PRODUCT DESCRIPTION

Product Name: Cornstarch
Synonyms: Argo, Kingsford, and Maizena Edible Cornstarch
CAS Number: N/A
Formula: N/A
Distributor: Carolina Biological Supply Company
2700 York Road
Burlington, NC 27215
Chemical Emergency Information:
800-227-1150 (8am–5pm [ET] M–F)
Chemtrec (Transportation Spill Response 24 hours):
800-424-9300

2. COMPOSITION/INFORMATION ON INGREDIENTS

Principal Hazardous Component: Starch (CAS #9005-25-8)
Note: This product is a food-grade product and is intended for edible uses.
TLV and PEL units:
ACGIH-TLV 10 mg/m³ (TWA)
OSHA-PEL 15 mg/m³ (Total Dust); 5 mg/m³ (respirable fraction)

3. HAZARD IDENTIFICATION

Emergency Overview: N/A
Potential Health Effects:
Eyes: The product is non-irritating. Contact with the eyes may produce temporary discomfort due to the presence of foreign objects.
Skin: The product is not a skin irritant nor is it known to be allergenic.
Ingestion: The product is non-irritating. Ingestion of large quantities may cause temporary discomfort in the mouth and upper gastrointestinal tract.
Inhalation: Inhalation of high concentrations of starch may cause transient irritation to the nose, throat, and upper respiratory tract. There are no known chronic toxic effects.

4. FIRST AID MEASURES

Eye Contact: Flush with water for at least 15 minutes. Get medical attention if required.
Skin: Thoroughly wash exposed area for at least 5 minutes. Get medical attention if irritation persists.
Ingestion: Treat symptomatically. Seek medical assistance if required.

Inhalation: Remove to fresh air. Give oxygen if breathing is difficult. Give artificial respiration if breathing has stopped. Keep person warm, quiet, and get medical attention.

5. FIREFIGHTING PROCEDURES

Flash Point (Method Used): N/A
NFPA Rating: N/A
Extinguisher Media: Water, carbon dioxide, dry chemical, or foam.
Flammable Limits in Air % by Volume: N/A
Autoignition Temperature: N/A
Special Firefighting Procedures: None applicable.
Unusual Fire and Explosion Hazards: At high concentrations, starch dust is explosive. The minimum explosive concentration is ca. 40 gm/m³ (0.04 oz/ft³). There is no defined maximum explosive concentration. The minimum electrical energy required to initiate an explosion is ca. 40 millijoules.

6. SPILL OR LEAK PROCEDURES

Sweep up product and/or flush with water. Use only explosion-proof vacuum cleaners and avoid creating high concentrations of airborne dust. If using dry methods, eliminate sources of ignition and static discharge.

7. SPECIAL PRECAUTIONS

Store containers in a dry place away from flames and incompatible materials (see Section 6).

8. SPECIAL PROTECTION INFORMATION

Respiratory Protection: Respiratory protection is not normally required. If product is used in a manner that generates airborne dust not controlled by ventilation, wear a NIOSH-approved respirator with filters for protection against dust and mist (type N95 minimum). For guidance on the selection and use of respiratory protection, consult American National Standard Z88.2-1992 (ANSI, New York, NY 10036 USA).
Ventilation: Use local exhaust ventilation if necessary to maintain airborne concentrations to within the appropriate exposure limit. Electrical connections for ventilation systems must be designed to prevent electrical or static discharges.
Skin Protection: Skin protection is not normally required.
Eye Protection: Eye protection is not required under normal conditions of use. If eye contact is likely, wear eye protection.

(continued)

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CORNSTARCH (CONT.)

9. PHYSICAL DATA

Molecular Weight: N/A
Melting Point: N/A
Boiling Point: N/A
Vapor Pressure: N/A
Vapor Density (Air=1): N/A
Specific Gravity (H₂O=1): ca. 1.5.
Percent Volatile by Volume: N/A
Evaporation Rate (H₂O=1): N/A
Solubility in Water: Partial.
Appearance and Odor: White, powders, cereal-like odor.

10. REACTIVITY DATA

Stability: Stable.
Conditions to Avoid: High concentrations of starch dust in air (>40 gm/m³) are potentially explosive. Avoid handling procedures that create dust clouds. Do not use product near open flames, welding or torch cutting, or near static discharges.
Incompatibility: Oxidizing agents.
Hazardous Decomposition Products: If the product is consumed by flame, thermal decomposition byproducts may include carbon monoxide, carbon dioxide, and smoke.
Hazardous Polymerization: Will not occur.

11. TOXICITY DATA

Oral Rat LD50: N/A
Effects of Overexposure: Acute: See Section 3.
None of the components of this product are classified as potential or demonstrated human carcinogens by IARC, NTP, or OSHA.
U.S. Food and Drug Administration (FDA): All ingredients in these products are approved as safe for their intended uses by the FDA in the applicable sections of 21 CFR.

12. ECOLOGICAL DATA

EPA Waste Numbers: None.

13. DISPOSAL INFORMATION

Dispose in accordance with Federal, State and Local regulations. Do not flush large quantities of product into wastewater treatment facilities without the approval of the appropriate authority.

14. TRANSPORT INFORMATION

N/A

15. REGULATORY INFORMATION

N/A

16. ADDITIONAL INFORMATION

The information provided in this Material Safety Data Sheet represents a compilation of data drawn directly from various sources available to us. Carolina Biological Supply makes no representation or guarantee as to the suitability of this information to a particular application of the substance covered in the Material Safety Data Sheet. Any employer must carefully assess the applicability of any information contained herein in regards to the particular use to which the employer puts the material.

Glossary

ACGIH American Conference of Governmental Industrial Hygienists.
CAS Number Chemical Abstracts Service Number.
CERCLA Comprehensive Environmental Response, Compensation, and Liability Act.
DOT U.S. Department of Transportation.
IARC International Agency of Research on Cancer.
N/A Not Available.
NTP National Toxicology Program.
OSHA Occupational Safety and Health Administration.
PEL Permissible Exposure Limit.
ppm Parts per million.
RCRA Resource Conservation and Recovery Act.
SARA Superfund Amendments and Reauthorization Act.
TLV Threshold Limit Value.
TSCA Toxic Substances Control Act.