

CORN STARCH AS (corn starch alkenylsuccinate)

Material Safety Data Sheet (MSDS)

1. PRODUCT IDENTIFICATION

Product Name: corn starch AS
 INCI Name: corn starch modified
 CAS Number: none reportable
 EINECS Number: none reportable

Skin Contact: Repeated or prolonged skin contact may result in mild irritation.
 Inhalation: May cause allergic respiratory reaction. This product can produce a nuisance dust which should be maintained below a time weighted average of 10 mg/m³. Avoid prolonged or repeated breathing of vapor or dust. Use only in well ventilated areas.
 Ingestion: Unlikely to be hazardous if swallowed (low oral toxicity)

2. PHYSICAL & CHEMICAL PROPERTIES

Melting Point: not applicable
 Boiling Point: not applicable
 Vapor Pressure, mmHg: not applicable
 Vapor Density, Air= 1: not applicable
 Evaporation Rate: not applicable
 % Volatile by Volume: 8-13%
 Specific Gravity: 1.5
 Solubility in water: insoluble
 Molecular Weight: > 10'000
 Appearance & Odor: white powder, starch odor
 pH Value (1% sol.): 5-7

8. FIRST AID MEASURES

Eye: Remove particles by irrigating with eye wash solution or clean water, holding the eyelids apart. If symptoms develop, get medical attention.
 Skin Contact: Wash skin with soap and water. If symptoms develop, obtain medical attention.
 Inhalation: Remove to fresh air, get medical attention if irritation persists

3. STABILITY & REACTIVITY

Chemical Stability: stable under normal conditions
 Hazardous Decomposition: does not undergo spontaneous decomposition. Typical combustion products include are carbon monoxide, carbon dioxide, nitrogen, and water.

9. FIRE FIGHTING MEASURES

Autoignition, Flash Point: Not available
 Extinguishing Media: Dry Chemical; CO₂; Water Fog; Foam
 Firefighting Procedures: No special procedures required.
 Fire & Explosion Hazards: Product is a finely divided combustible powder and as such constitutes a potential fire hazard. Keep workplace dust levels below the stipulated exposure limits. Prohibit smoking and open flames. Avoid sparks or other sources of static electricity. Minimum ignition temperature of dust cloud- approx. 390 C. Minimum explosive concentration approx. 70 mg/l. Minimum energy to ignite cloud by electrical spark- approx. 0.06 joules.
 Explosion Limits (%): lower 60.0 g/m³, upper not applicable
 Minimum Ignition Energy: 10 - 30 mJ, Kst Class 1 = Weak explosion. Kst Value 187.4 bar.m³/s

4. HANDLING & STORAGE

Storage Temperature: ambient
 Handling/ Storage: Store in a cool, dry area away from heat, sparks or fire. Mechanical handling of the powder on inadequately grounded equipment can result in static electrical discharges. All handling equipment must be properly grounded. Sensitive to static electricity. Use care to minimize dust generation in normal use conditions. Avoid dispersing the powder in the air. Prevent buildup of powder on surfaces.

10. TOXICOLOGICAL INFORMATION

Route of Entry: eye contact, skin contact, inhalation, ingestion
 Carcinogenicity: There is no evidence that this product poses a carcinogenic risk under normal conditions of handling and use.
 Chronic (long term) Effects of Exposure: not established, target organs: respiratory system.
 Oral Toxicity: Oral LD₅₀: Rat > 5 g/kg
 Product Information: Unlikely to cause harmful effects under normal conditions of handling and use. Slight eye irritant.

5. ACCIDENTAL RELEASE MEASURES

Isolate spill area immediately. Keep unauthorized personnel away. Ventilate closed spaces before entering. Do not walk through spilled material. Prevent entry into waterways, sewers, basements or confined areas. Surface may become slippery after spillage. Use vacuum or broom sweeping and remove to disposal container.

11. DISPOSAL CONSIDERATIONS

Storage and disposal must be in accordance with applicable local, state & federal disposal regulations. Characterization and compliance with applicable laws are the responsibility solely of the generator.

6. EXPOSURE CONTROLS & PERSONAL PROTECTION

Ventilation Requirements: General.
 Eye Protection Requirements: Wear safety glasses with side shields. Protect against dust and particulates.
 Glove & Clothing Requirements: Use of chemically resistant gloves is recommended. Coveralls, or a lab coat should be worn. Remove contaminated clothing and launder before reuse. Wash before eating, drinking, or using toilet facilities.
 Respirator Requirements: NIOSH approved dust mask.

12. TRANSPORT INFORMATION

This section provided for general information only. For non-bulk shipments. For more complete transportation regulatory information please refer to the shipping documents accompanying the shipment of this product. DOT Classification: Proper shipping name: not regulated. The information provided herein may not include the impact of additional regulatory requirements (eg, for materials meeting the definition of a hazardous waste under RCRA, hazardous substances under CERCLA, and/of marine pollutants under CWA or other similar federal, state or local laws) or any associated exceptions or exemptions under regulations applicable to the transport of this material.

7. HAZARDS IDENTIFICATION

General: Possible physical irritant from dust particles. Potential for dust explosion.
 Eye: Particulates may scratch eye surfaces and cause mechanical irritation

ALL DATA HEREIN ARE ALL AS PER OUR SUPPLIER.