

Safety Data Sheet

Section 1: Identification

Product identifier

- Product Name** • Powdered Sugar
- Product Code** • N/A

Relevant identified uses of the substance or mixture and uses advised against

- Recommended use** • Human Food and Sweetening Agent

Details of the supplier of the safety data sheet

Company National Sugar Marketing LLC
100 Galleria Parkway SE
Suite 1400
Atlanta, GA 30339

- Telephone (General)** • 208-383-6500

Emergency telephone number

- Manufacturer** • 208-383-6515 – Mike Fowers

Section 2: Hazard Identification

United States (US)
According to OSHA 29 CFR 1910.1200 HCS

Classification of the substance or mixture

- OSHA HCS 2012**
- Dust explosion potential
 - Nuisance dust

Label elements

- OSHA HCS 2012**
- Product is subject to labeling requirements of Federal Food, Drug, and Cosmetic Act, 21 U.S.C. 301 *et seq.* (29 CFR §1910.1200(5)(iii))

Explosive

- OSHA PEL**
- Product is explosive if TWA Dust = 15 milligrams of substance per cubic meter of air (15 mg/m³). (29 CFR §1926.55 Appendix A)

NIOSH REL

- Product is explosive if TWA Dust = 15 milligrams of substance per cubic meter of air (15 mg/m³). (The National Institute for Occupational Safety and Health)

Inhalation

OSHA PEL

- Product is an inhalation irritant if TWA = 5 milligrams of substance per cubic meter of air (5 mg/m³). (29 CFR §1926.55 Appendix A)

NIOSH REL

- Product is an inhalation irritant if TWA = 5 milligrams of substance per cubic meter of air (5 mg/m³). (The National Institute for Occupational Safety and Health)

Other

- Product has no hazardous components. (29 CFR §1910.1200)

Note

- SDS data pertains to the product as delivered in the original shipping container(s). Risks of adverse effects are lessened by following all prescribed safety precautions including the use of proper personal protective equipment.

Section 3: Composition/Information on Ingredients

Substances

- Product does not meet the criteria of a substance.

Mixtures

Hazardous Components					
Chemical Name	Identifiers	%(Weight)	LD50/LC50	Classifications According to Regulation/Directive	Comments
Sucrose	CAS No.: 57-50-1	96%	Oral LD50 (Rat): 29,700 mg/kg	OSHA HCS 2012: No classification per Electronic Code of Federal Regulations. (n.d.). Retrieved March 31, 2015, from http://www.ecfr.gov/ Appendix B.1.3.1 (Note) to §1910.1200	NDA
Corn Starch	CAS No.: 9005-84-9	4%	NDA	OSHA HCS 2012: No Classification	NDA

Section 4: First Aid Measures

Description of first aid measures

Eye

- Flush eyes immediately with copious amounts of water.

Inhalation

- Move affected person to fresh air. Administer oxygen if breathing is difficult.

Note

- Eye and respiratory discomfort may be experienced at high dust concentrations. Pre-existing respiratory conditions or allergies may be aggravated.

Section 5: Fire-Fighting Measures

Extinguishing Media**Suitable Extinguishing Media**

- Extinguish with water, foam, carbon dioxide, or dry powder.

Special Hazards**Combustible Dust**

- When TWA Dust = 15 milligrams of substance per cubic meter of air. (29 CFR §1926.55 Appendix A)

Hazardous Combustion Products

- Carbon Oxides

Hazardous Decomposition

- When heated acrid smoke and fumes are emitted.

Hazardous Reactivities & Incompatibilities

- Oxidizers, sulfuric acid, and nitric acid

Ignition Temperature

- 420° C

Advice for Firefighters

- Use care when using high pressure water streams to avoid creating airborne dust. Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

Section 6: Accidental Release Measures

Personal precautions, protective equipment and emergency procedures**Personal Precautions**

- Avoid dust formation. Avoid breathing vapors, mist or gas. Wear appropriate personal protective equipment.

Methods and material for containment and cleaning up**Spill Cleanup**

- Sweep up spilled mixture and remove to safe place. Dust deposits should not be allowed to accumulate on surfaces, as this may form an explosive mixture if released into the atmosphere in sufficient concentration. Non-sparking tools should be used. Wash with water after major volume of spill is cleaned up.

Section 7: Handling and Storage

Precautions for safe handling

Handling

- Minimize dust generation and accumulation. Provide appropriate exhaust ventilation at places where dust may form.

Conditions for safe storage, including any incompatibilities

Storage

- Store at ambient temperature and humidity. Temperature should be less than 32° C Relative humidity should be less than 70%. Precautions should be taken to provide for adequate electrical grounding and bonding, or inert atmospheres. Refer to NFPA 654: Standard for the Prevention of Fire and Dust Explosions from the Manufacturing, Processing, and Handling of Combustible Particulate Solids 2013 edition, for safe handling. Also refer to NFPA 61: Standard for the Prevention of Fires and Dust Explosions in Agricultural and Food Processing Facilities 2013 edition.

Section 8: Exposure Controls/Personal Protection

Exposure Limits

Explosive

OSHA PEL

- Product is explosive if TWA Dust = 15 milligrams of substance per cubic meter of air (15 mg/m³). (29 CFR §1926.55 Appendix A)

NIOSH REL

- Product is explosive if TWA Dust = 10 milligrams of substance per cubic meter of air (10 mg/m³). (The National Institute for Occupational Safety and Health)

Inhalation

OSHA PEL

- Product is an inhalation irritant if TWA = 5 milligrams of substance per cubic meter of air (5 mg/m³). (29 CFR §1926.55 Appendix A)

NIOSH REL

- Product is an inhalation irritant if TWA = 5 milligrams of substance per cubic meter of air (5 mg/m³). (The National Institute for Occupational Safety and Health)

Exposure Controls

Engineering Controls

- Ventilation should be matched to conditions. Local exhaust ventilation or other engineering controls should be used to maintain airborne levels to an acceptable level. Explosion suppression systems are advised. Use only electrical equipment and powered industrial trucks classified for the appropriate conditions.

Respiratory Protection

- Respirators are to be used if exposure exceeds recommended limits. NIOSH – approved dust mask may be used in dusty conditions.

Hygiene Measures

- Current Good Manufacturing Practices should be followed. Refer to U.S. Food and Drug Administration Code of Federal Regulations 21 CFR 110.
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Key to abbreviations

NIOSH = National Institute of Occupational Safety and Health

OSHA = Occupational Safety and Health Administration

TWA = Time-Weighted Averages are based on 8h/day, 40h/week exposures.

Section 9: Physical and Chemical Properties

Material Description

Appearance	<ul style="list-style-type: none">• Powder
Color	<ul style="list-style-type: none">• White
Density	<ul style="list-style-type: none">• 24-30 lbs./cu ft.
Melting Point	<ul style="list-style-type: none">• 186° C
Molecular Formula	<ul style="list-style-type: none">• Sucrose: $C_{12}H_{22}O_{11}$• Corn Starch: $C_{27}H_{48}O_{20}$
Molecular Weight	<ul style="list-style-type: none">• 356.32 g/mol
Odor	<ul style="list-style-type: none">• Sweet
pH	<ul style="list-style-type: none">• 6 – 7 in 50% water solution
Solubility in Water	<ul style="list-style-type: none">• Sucrose is very soluble in water (200 gm/100gm water at 20° C)• Corn starch is insoluble
Taste	<ul style="list-style-type: none">• Sweet

Section 10: Stability and Reactivity

Reactivity	<ul style="list-style-type: none">• No dangerous reaction known under conditions of normal use
Chemical stability	<ul style="list-style-type: none">• Stable product at normal temperatures
Incompatible Materials	<ul style="list-style-type: none">• Oxidizers, sulfuric acid, and nitric acid
Conditions to avoid	<ul style="list-style-type: none">• Excessive dust
Hazardous Decomposition	<ul style="list-style-type: none">• When heated to decomposition acrid smoke and fumes are emitted.

Section 11: Toxicological Information

Information on toxicological effects

Carcinogens	<ul style="list-style-type: none">• None listed
Acute Toxicity	

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|-------------------------|---|
| Test results | <ul style="list-style-type: none">• Sucrose: Oral LD50 (Rat): 29,700 mg/kg• Corn Starch: No data available |
| Chronic Toxicity | <ul style="list-style-type: none">• No additional adverse health effects noted |
| Other Acute | <ul style="list-style-type: none">• No additional adverse health effects noted |

Section 12: Ecological Information

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|-----------------|---|
| Toxicity | <ul style="list-style-type: none">• Not dangerous to the environment based on ecotoxicity studies |
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Section 13: Disposal Considerations

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|----------------------------|--|
| General Information | <ul style="list-style-type: none">• Dispose of waste in accordance with local authority requirements |
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Section 14: Transport Information

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|----------------------------|---|
| General Information | <ul style="list-style-type: none">• Transport in food grade containers/trailers |
| Other Information | <ul style="list-style-type: none">• No other transportation requirements |

Section 15: Regulatory Information

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|---------------------------------|--|
| OSHA | <ul style="list-style-type: none">• OSHA HCS 2012• 29 CFR §1910.1200• 29 CFR §1926.55 Appendix A |
| U.S. Federal Regulations | <ul style="list-style-type: none">• Code of Federal Regulations Title 21 Part 110 |

Section 16: Other Information

Hazard Ratings

National Fire Protection Association (NFPA)

- Fire = 0
- Health = 0
- Reactivity = 0
- Specific Hazard = None

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NATIONAL SUGAR MARKETING

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Supersedes: 02

To the best of our knowledge, the information contained herein is accurate. However, neither the above named supplier nor any of its subsidiaries assumes any liability whatsoever for the accuracy or completeness of the information contained herein.

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