



SAFETY DATA SHEET

N-DULGE(R) 333

1. Identification

Product identifier used on the label:

PRODUCT NUMBER (NEW): 06850301
PRODUCT NUMBER (OLD): 52-1550
PRODUCT NAME: N-DULGE(R) 333

Other means of identification

Chemical family: Modified Starch

Recommended use of the chemical and restrictions on use

Recommended use: Food products
Restrictions on use: Not Available

Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party:

Ingredion Incorporated
5 Westbrook Corporate Center
Westchester, IL. 60154, USA
Phone: 708-551-2600 (business hours)
MEDICAL: 1-866-374-2659 (Health & Safety Call Center - 24 hours)
TRANSPORT: 1-800-424-9400 (CHEMTREC - 24 hours)

Emergency phone number:

2. Hazard(s) identification

Classification of the chemical in accordance with paragraph (d) of §1910.1200

GHS Hazard

Symbols:

No hazard symbols required

GHS Classification:

Combustible Dust Category 1

Signal Word:

Warning

Hazard Statements:

May form combustible dust concentrations in air.

Safety Precautions:

No Precautionary Statement needed.

Hazards not otherwise classified:

None known.

3. Composition/information on ingredients

Chemical Name:	CAS #	%
None classified as hazardous under the OSHA Hazard Communication Standard (29CFR 1910.1200).		

4. First-aid measures

Description of necessary measures, subdivided according to the different routes of exposure, i.e., inhalation, skin and eye contact, and ingestion

Inhalation:	Remove to fresh air. Get medical attention if irritation persists.
Eye Contact:	If symptoms develop, obtain medical attention. Remove particles by irrigating with eye wash solution or clean water, holding the eyelids apart.
Skin Contact:	Wash skin with soap and water.
Ingestion:	None required.
Most important symptoms/effects, acute and delayed:	Possible physical irritant from dust particles. Potential for dust explosion.
Indication of immediate medical attention and special treatment needed, if necessary:	No further first aid information is available.

5. Fire-fighting measures

Suitable (and unsuitable) extinguishing media

Suitable extinguishing media:	Dry Chemical; CO ₂ ; Water Fog; Foam
Unsuitable extinguishing media:	None known.
Specific hazards arising from the chemical:	Minimum ignition temperature of dust cloud- approx. 390 C. Minimum explosive concentration- approx. 80 mg/l. Minimum energy to ignite cloud by electrical spark- approx. 0.10 joules.
Hazardous combustion products:	This product does not undergo spontaneous decomposition. Typical combustion products are carbon monoxide, carbon dioxide, nitrogen and water.
Special protective equipment and precautions for fire-fighters:	No special procedures are required.

6. Accidental release measures

Personal precautions, protective equipment and emergency procedures:	Use personal protective equipment as required.
Methods and materials for containment and cleaning up:	Normal precautions for "nuisance dust" should be observed. Avoid prolonged inhalation of dust. Sweep up or vacuum up and place in suitable container for disposal.

7. Handling and storage

Precautions for safe handling:	As with all chemicals, good industrial hygiene practices should be followed when handling this material.
Safe storage conditions	
Special Sensitivity:	Not available
Sensitivity to Mechanical	No



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Impact:

Sensitivity to Static Electricity: Yes

Other Precautions: Use care to minimize dust generation in normal use conditions.
Avoid dispersing the powder in the air. Prevent buildup of powder on surfaces.

Materials to Avoid/Chemical Incompatibility: None known

8. Exposure controls/personal protection

OSHA permissible exposure limit (PEL), American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Value (TLV), and any other exposure limit used or recommended by the chemical manufacturer, importer, or employer preparing the safety data sheet, where available:

Chemical Component	OSHA PEL	ACGIH TLV-TWA	AIHA Exposure limits
No data available			

This product can produce a nuisance dust which should be maintained below a time weighted average of 10 mg/m³.

Appropriate engineering controls

Ventilation Requirements: General.

Individual protection measures, such as personal protective equipment.:

Eye Protection: Safety glasses recommended.
Skin Protection: Gloves are not normally required for foreseeable conditions of use.
Respiratory Protection: NIOSH approved dust mask.
Other Protective Equipment: Not normally required.
General Hygiene Conditions: Wash before eating, drinking, or using toilet facilities.
Change/Removal of Clothing: Not applicable.

9. Physical and chemical properties

Pure Substance or Mixture: Pure
Physical state: Powder.
Color: White
Odor: Starch
Odor Threshold: Not available
Molecular Weight: > 10000
pH: Not applicable
pH in (1%) Solution: Approximately 6
Melting Point (°C): Not available
Initial boiling point and boiling range (°C): Not available
Flash Point (°C): Not Applicable
Evaporation Rate: Not applicable
Flammability (solid, gas): No
Upper flammability or Not available

explosive limits:

Lower flammability or explosive limits:	Not available
Vapor pressure:	Not available
Vapor density:	Not available
Relative density:	Not available
Specific Gravity:	1.5
Solubility(ies) (in water):	Insoluble
Partition coefficient: n-octanol/water:	Not available
Auto-ignition temperature (°C):	No data available

Decomposition temperature (°C): Not determined.

Viscosity: Not available

Volatiles: None

Volatile Organic Chemicals: Not applicable

10. Stability and reactivity

Reactivity:	Not expected to be reactive
Chemical stability:	Stable
Possibility of hazardous reactions:	Hazardous polymerization will not occur.
Conditions to avoid (e.g., static discharge, shock, or vibration):	None known.
Incompatible materials:	None known.
Hazardous decomposition products:	This product does not undergo spontaneous decomposition. Typical combustion products are carbon monoxide, carbon dioxide, nitrogen and water.

11. Toxicological information

Information on the likely routes of exposure (inhalation, ingestion, skin and eye contact):	Eye Contact, Skin Contact, Inhalation, Ingestion
Symptoms related to the physical, chemical and toxicological characteristics:	No data available

Delayed and immediate effects and also chronic effects from short- and long-term exposure:

Acute (Short Term) Effects of Exposure

Effects of Acute Exposure Unlikely to cause harmful effects under recommended conditions of handling and use.

Chronic (Long Term) Effects of Exposure

Effects of Chronic Exposure This product is considered as being non-toxic. Use of good industrial hygiene practices is recommended.

Target Organs Not applicable.

Numerical measures of toxicity (such as acute toxicity estimates):

Has the chemical been classified as a Carcinogen by NTP, IARC or OSHA:

Chemical Name	OSHA Carcinogen	IARC Carcinogen	NTP Carcinogen
There are no components that are known or reported to cause cancer			

12. Ecological information

Ecotoxicity (aquatic and terrestrial, where available): No information available.

Persistence and degradability: No data available

Bioaccumulative potential: No data available

Mobility in soil: Unknown

Other adverse effects (such as hazardous to the ozone layer): None known.

13. Disposal considerations

Waste Disposal Methods: Disposal should be in accordance with local, state or national legislation.

Empty Container Warnings: Empty containers may contain product residue; follow SDS and label warnings even after they have been emptied.



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14. Transport information

DOT Classification: Not regulated
UN number: Not Applicable
UN proper shipping name: Not Applicable
Transport hazard class(es): Not Applicable
Packing group, if applicable: Not Applicable
Environmental hazards (e.g., Marine pollutant (Yes/No)): No data available
Special precautions: Consult IMO regulations before transporting in bulk by ocean.

15. Regulatory information

TSCA Status: This product is manufactured in compliance with all provisions of the Toxic Substances Control Act, 15 U.S.C. 2601 et. seq.
FDA: 21CFR172.892.

SARA - Section 313 (Superfund Amendments and Reauthorization Act of 1986 - 40CFR 372)
CAS NUMBER CONCENTRATION
(% by weight)

Contains no substances at or above the reporting threshold under Section 313.

CALIFORNIA PROPOSITION 65

WARNING: This product contains the following chemicals that are known to the State of California to cause cancer, birth defects or other reproductive harm.

Unless a concentration is specified in Section 2 of the SDS, the below chemical/s are present in trace amounts.

Component CAS NUMBER
None reportable.

16. Other information, including date of preparation or last revision.

HMIS® Hazard Ratings

HMIS® ratings are based on a 0-4 rating scale, with 0 representing minimal hazards or risks, and 4 representing significant hazards or risks. Although HMIS® ratings are not required on SDSs by OSHA's 29 CFR 1910.1200, we choose to provide them as a service to our customers using HMIS®. These ratings are to be used only with a fully implemented HMIS® program. To deal adequately with the safe handling of this material, all the information contained in this SDS must be considered. NPCA recommends that employers must determine appropriate PPE for the actual conditions under which this product is used in their workplace. For information on PPE codes, consult the HMIS® Implementation Manual. When two ratings are provided for Health, the first represents the material 'as supplied', and the second represents the material 'in use'. * = chronic health hazard HMIS® is a registered trademark of the National Paint and Coatings Association (NPCA).

Health

1

Flammability

1

Reactivity

0



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Revision Date 31-July-2021
FOR INFORMATION CONTACT: For product information, contact:
Ingredion Incorporated
Customer Service: 1-800-713-0208
Revision Number None known.

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