

**Section 1 - Identification****Product identifier:**

Product Number: 06820323  
Product Name: N-DULGE(TM) 320  
food starch

**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

**Details of manufacturer or importer:**

Ingredion ANZ Pty Ltd  
Suite 3.02 level 3, Building 1,  
Riverview Business Park,  
3 Richardson Place, North Ryde NSW 2113  
Tel : +612 9911 1200 (business hours)

**Emergency phone number:**

CHEMTREC - Emergency Telephone (Medical & Transport Incident With Product- 7Days/24 Hours)  
The global (outside US) number: +1 703-741-5970  
Australia: +(61)-290372994  
China: 4001-204937  
Hong Kong: 800-968-793\*  
India: 000-800-100-7141\*  
Indonesia: 001-803-017-9114\*  
Japan: +(81)-3-4520-9637  
Malaysia: +(60)-392125794, 1-800-815-308\*  
New Zealand: +(64)-98010034  
Philippines: +(63) 2-395-3308, 1-800-1-116-1020\*  
Singapore: +(65)-31581349, 800-101-2201\*  
South Korea: +(82) 070-7686-0086, 00-308-13-2549\*  
Taiwan: +886-2-7741-4207\*, 00801-14-8954\*  
Thailand: 001-800-13-203-9987\*  
Vietnam: +(84)-444581938  
\* Phone numbers for countries marked with an asterisk must be dialed within the country  
SDS Requests and general information, please contact Local Customer Service: See phone numbers in Section 16

**Classification of the hazardous chemical:**
**GHS Hazard Symbols:**

No hazard symbols required

**GHS Classification:**

Not classified by GHS criteria

**Signal Word:**

No Signal Word needed.

**Hazard Statements:**

No Hazard Statement needed.

**Precautionary Statements:**

No Precautionary Statement needed.

**Australia Supplemental Hazard Information:**

No data available

**Hazards not otherwise classified:**

None known.

**Section 3 - Composition and information on ingredients**

Chemical Name	CAS No.	Concentration (% by weight)
Not classified as hazardous.		

**Section 4 - First-aid measures**
**Description of necessary first aid measures:**

Inhalation:	Remove to fresh air. Get medical attention if irritation persists.
Eye Contact:	Remove particles by irrigating with eye wash solution or clean water, holding the eyelids apart. If symptoms develop, obtain medical attention.
Skin Contact:	Wash skin with soap and water.
Ingestion:	None required.

**Symptoms caused by exposure:**

Possible physical irritant from dust particles. Potential for dust explosion.

**Medical attention and special treatment:**

No further first aid information is available.

**Section 5 - Firefighting measures**
**Suitable extinguishing equipment:**

Suitable extinguishing media:	Dry Chemical, CO2, Water Fog, Foam
Unsuitable extinguishing media:	None known.

**Specific hazards arising from the chemical:**

**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 firefighters:**

Do not enter fire area without proper protection including self- contained breathing apparatus and full protective equipment.

## Section 6 - Accidental release measures

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

Use personal protective equipment as required.

**Environmental precautions:**

No data available

**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.

## Section 7 - Handling and storage

**Precautions for safe handling:**

As with all chemicals, good industrial hygiene practices should be followed when handling this material.

**Conditions for safe storage, including any incompatibilities:**

Safe storage conditions:

Keep container closed when not in use.

Static Sensitivity:

Yes

Other precautions:

Avoid dispersing the powder in the air. Prevent buildup of powder on surfaces.

Materials to Avoid/Chemical Incompatibility:

None known

## Section 8 - Exposure controls and Personal protection

**Exposure control measures:**

Chemical Name	Australia - Occupational Exposure Standards - TWAs (ppm)	Australia - Occupational Exposure Standards - STELs (ppm)
No data available		

This product can produce a nuisance dust which should be maintained below a time weighted average of 10 mg/m<sup>3</sup>.

**Engineering controls:** General.

**Individual protection measures, for example personal protective equipment (PPE):**

**Respiratory protection:** NIOSH approved dust mask.

**Thermal hazards:** Not available

**Eye and face protection:** Safety glasses recommended.

**Skin protection:** Skin protection may be required depending on product temperature.

**Gloves:** Gloves are not normally required for foreseeable conditions of use.

**Other protective equipment:** Not normally required. Not applicable.

**General hygiene conditions:** Wash before eating, drinking, or using toilet facilities.

## Section 9 - Physical and chemical properties

**Appearance (physical state, color etc.):**

Pure Substance or Mixture: Pure

Physical State: Powder

Colour: White

**Odour:** Starch

**Odour Threshold:** Not available

**pH:** Not available

**pH in (1%) Solution:** Approximately 6

**Melting point/freezing point:**

Melting Point: Not available

Freezing point: Not available

**Initial boiling point and boiling range:** Not available

**Flash Point:** Not applicable

**Evaporation Rate:** Not applicable

**Flammability (solid, gas):** No

**Upper/lower flammability or explosive limits:**

Upper flammability or explosive limits: Not available

Lower flammability or explosive limits: Not available

**Vapour pressure:** Not available

**Vapour density:** Not available

**Relative density:** 1.5

**Solubility:** Insoluble

**Partition coefficient: n-octanol/water:** Not available

<b>Auto-ignition temperature:</b>	Not available
<b>Decomposition temperature:</b>	Not available
<b>Viscosity:</b>	Not applicable
<b>Volatiles:</b>	None
<b>Volatile Organic Chemicals:</b>	Not applicable
<b>Other Information:</b>	
<b>Particle Characteristics:</b>	Not applicable
<b>Particle size:</b>	Not applicable
<b>Shape and aspect ratio:</b>	Not applicable
<b>Size distribution:</b>	Not applicable
<b>Surface area:</b>	Not applicable
<b>Heat of decomposition:</b>	Not applicable
<b>Specific heat value:</b>	Not applicable
<b>Saturated vapour concentration:</b>	Not applicable
<b>Release of invisible flammable vapours and gases:</b>	Not applicable
<b>Crystallinity:</b>	Not applicable
<b>Dustiness:</b>	Not applicable
<b>Degree of aggregation or agglomeration, and dispersibility:</b>	Not applicable
<b>Redox potential:</b>	Not applicable
<b>Biodurability or biopersistence:</b>	Not applicable
<b>Surface coating or chemistry:</b>	Not applicable

## Section 10 - Stability and reactivity

<b>Reactivity:</b>	Not expected to be reactive.
<b>Chemical stability:</b>	Stable
<b>Possibility of hazardous reactions:</b>	Hazardous polymerization will not occur.
<b>Conditions to avoid:</b>	None known
<b>Incompatible materials:</b>	None known
<b>Hazardous decomposition products:</b>	This product does not undergo spontaneous decomposition. Typical combustion products are carbon monoxide, carbon dioxide, nitrogen and water.

## Section 11 - Toxicological information

**Description of the various toxicological (health) effects and the available data used to identify those effects:**

**Information on possible routes of** Eye Contact, Skin Contact, Inhalation, Ingestion

**exposure:**

**Target Organs Potentially Affected By Exposure:** Not applicable.

**Early onset symptoms related to exposure:** No data available

**Toxic Effects:** This product is considered as being non-toxic. Use of good industrial hygiene practices is recommended.

**Exposure levels and health effects:**
**Acute toxicity:**

Ingestion Toxicity: Based on available data, the GHS classification criteria are not met.

Acute toxicity - Dermal: Based on available data, the GHS classification criteria are not met.

Inhalation Toxicity: Based on available data, the GHS classification criteria are not met.

**Skin corrosion/irritation:** Wash skin with soap and water. Unlikely to cause harmful effects under recommended conditions of handling and use.

**Serious eye damage/irritation:** Based on available data, the GHS classification criteria are not met.

**Respiratory sensitisation:** Based on available data, the GHS classification criteria are not met.

**Skin sensitisation:** Based on available data, the GHS classification criteria are not met.

**Germ cell mutagenicity:** Based on available data, the GHS classification criteria are not met.

**Reproductive Toxicity:** Based on available data, the GHS classification criteria are not met.

**Carcinogenicity:** No.

**Specific Target Organ Toxicity (STOT)-single exposure:** Based on available data, the GHS classification criteria are not met.

**Specific Target Organ Toxicity (STOT) -repeated exposure:** Based on available data, the GHS classification criteria are not met.

**Aspiration hazard:** Based on available data, the GHS classification criteria are not met.

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

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
There is no known toxicity data available for the components or the product.			

**Section 12 - Ecological information**

**Ecotoxicity:** No information available.

**Ecological Toxicity Data:**

Chemical Name	CAS No.	Aquatic LC50 Fish	Aquatic ERC50 Algae	Aquatic EC50 Crustacea
No data available				

**Persistence and degradability:** No data available

**Bioaccumulative potential:** No data available

**Mobility in soil:** Unknown

**Other adverse effects:** None known.

**Section 13 - Disposal considerations**

**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.

**Section 14 - Transport information**

**ADG Classification:** Not regulated

**UN number:** Not applicable

**Proper shipping name or technical name:** Not applicable

**Transport hazard class:** Not applicable

**Packing group:** Not applicable

**Toxic Inhalation Hazard Zone:** No data available

**Environmental hazards for transport purposes:** No data available

**Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code):** No data available

**HAZCHEM Code:** No data available

**Special precautions for user:** Consult IMO regulations before transporting in bulk by ocean.

**Section 15 - Regulatory information**
**Safety, health and environmental regulations:**

**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.

**Agricultural and Veterinary Chemicals Code Act 1994 (Commonwealth)**

Chemical Name	CAS No.	Australia - Agricultural and Veterinary Chemicals (Administration) Regulations - Schedule 1 - Part 2	Australia - Agricultural and Veterinary Chemicals (Administration) Regulations - Schedule 1 - Part 3
No data available			

**Australia Dangerous Goods**

Chemical Name	CAS No.	Australia - Dangerous Goods Code - ADG - Hazard Classifications	Australia - Dangerous Goods Code - ADG - Regulated Substances
No data available			

**Industrial Chemicals (Notification and Assessment) Act 1989 (AICS)**

Chemical Name	CAS No.	Inventory - Australia - Inventory of Chemical Substances (AICS) - Comparable Chemicals	Inventory - Australia - Inventory of Chemical Substances (AICS) - Excluded Use Chemicals
No data available			

**Inventory - Australia - Inventory of Industrial Chemicals (AIIC)**

Chemical Name	CAS No.	Inventory - Australia - Inventory of Industrial Chemicals (AIIC)
No data available		

**Montreal Protocol on Substances that Deplete the Ozone Layer**

Chemical Name	CAS No.	Montreal Protocol on Substances that Deplete the Ozone Layer
No data available		

**Stockholm Convention on Persistent Organic Pollutants**

Chemical Name	CAS No.	Stockholm Convention on Persistent Organic Pollutants
No data available		



**Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade**

Chemical Name	CAS No.	Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade
No data available		

**Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal**

Chemical Name	CAS No.	Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal
No data available		

**Section 16 - Any other relevant information**

**Revision Date:** 12-22-2022

**Supersedes:** 11-20-2022

**Revision Number:** 3

**Reason for revision:** New

**FOR INFORMATION CONTACT:** Australia:Ingredion ANZ Pty Ltd  
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