

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
New Zealand Branch
30 Verissimo Drive, Mangere, Auckland, New Zealand 2022
PO Box 112206 Penrose, Auckland 1642
Tel: +64 2 1274 2063 (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
India: 000-800-100-7141*
Indonesia: 001-803-017-9114*
Japan: +(81)-3-4520-9637
Malaysia: +(60)-392125794
New Zealand: +(64)-98010034
Philippines: +(63) 2-395-3308, 1-800-1-322-0553*
Singapore: +(65)-31638374, 800-101-2201*
South Korea: +(82) 070-7686-0086, 080-880-0454*
Taiwan: +886-2-7741-4207*, 00801-49-1821*
Thailand: 1800014808*
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:

Hazardous to the aquatic environment - Acute Category 3

Signal Word:

No signal word needed.

Hazard Statements:

H402 - Harmful to aquatic life.

Precautionary Statements:
Prevention:

P273 - Avoid release to the environment.

Disposal:

P501 - Dispose of contents/container to a suitable disposal site in accordance with the Hazardous Substances (Disposal) Regulations 2001.

Hazards not otherwise classified:

None known.

Section 3 - Composition/information on ingredients
Substance:

Not applicable

Mixture:

Chemical Name	Common name and synonyms	CAS No.	Concentration (% by weight)
No hazardous components.			

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.

Most important symptoms and effects, acute and delayed, 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 - Fire-fighting measures

Suitable extinguishing equipment:

Suitable extinguishing media: Dry Chemical, Carbon dioxide, 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:

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/Personal protection

Exposure control measures:

Chemical Name	New Zealand - Occupational Exposure Standards - TWA	New Zealand - Occupational Exposure Standards - STEL	New Zealand - Occupational Exposure Standards - CEIL	New Zealand - Biological Exposure Limit - BEL
No data available				

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

Engineering controls: General.

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

Respiratory protection: NIOSH approved dust mask.

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, colour 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

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
Auto-ignition temperature:	Not available
Decomposition temperature:	Not available
Kinematic viscosity:	Not applicable
Particle Characteristics:	Not applicable

Section 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:	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.

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 exposure:	Eye Contact, Skin Contact, Inhalation, Ingestion
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.
Carcinogenicity:	No.
Reproductive Toxicity:	Based on available data, the GHS classification criteria are not met.
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

UN number: Not applicable
UN Proper shipping name: Not applicable
UN dangerous goods class and subsidiary: Not applicable
UN Packing group: Not applicable
Toxic Inhalation Hazard Zone: No data available

Environmental hazards (e.g., Marine pollutant): 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

New Zealand - GHS Classifications - HSNO Chemical Classification Information Database (CCID)

Chemical Name	CAS No.	New Zealand - GHS Classifications - HSNO Chemical Classification Information Database (CCID)
No data available		

New Zealand Inventory of Chemicals (NZIOC)

Chemical Name	CAS No.	New Zealand Inventory of Chemicals (NZIOC)
No data available		

New Zealand - Priority List of Hazardous Substances

Chemical Name	CAS No.	New Zealand - Priority List of
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		Hazardous Substances
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: Other information
Revision Date: 09-09-2025

Supersedes: 08-06-2024

Revision Number: 7

Reason for revision: New

Key abbreviations or acronyms used: CAS = Chemical Abstract Service

DNEL= Derivative No Effect Level

EC= European Community

EINECS = European Inventory of Existing Chemical Substances

MSHA = Mine Safety Health Administration

NIOSH = National Institute of Occupational Safety & Health

OEL = Occupational Exposure Limit

PBT= Persistent, Bioaccumulative, Toxic

PNEC= Predicted No Effect Concentration

SCOEL= Scientific Committee on Occupational Exposure Limits

TLV = Threshold Limit Value

TWA= Time Weighted Average

vPvB= Very Persistent, Very Bioaccumulative

Wt.% = Weight Percent

For Information Contact:

New Zealand: Ingredion ANZ Pty Ltd

Customer Service : +64-9-5820284 (Business Hours)

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