

## 1. Identification

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**Product identifier used on the label:** 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

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

**SUPPLIER**

Ingredion ANZ Pty Ltd  
170 Epping Rd Lane Cove, NSW, Australia 2066  
Tel : +612 9911 1200 (business hours)

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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

## 2. Hazard(s) identification

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### Classification of the chemical in accordance with WHS regulations:

**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.

**Hazards not otherwise classified:**

None known.

## 3. Composition/information on ingredients

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Chemical Name	Common name and synonyms	CAS #	%
Not classified as hazardous.			

## 4. First-aid measures

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### 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,**

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

**acute and delayed:**

**Indication of immediate medical attention and special treatment needed, if necessary:** None known.

## 5. Fire-fighting measures

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**Suitable (and unsuitable) extinguishing media:**

**Suitable extinguishing media:** Dry Chemical, CO2, 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

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**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

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**Precautions for safe handling:** Normal precautions for handling chemicals are applicable.

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

**Safe storage conditions:**

**Special Sensitivity:** Not available

**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:**

No data available

## 8. Exposure controls/personal protection

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**Control parameters:**

Chemical component	Australia - Occupational Exposure Standards - TWAs	Australia - Occupational Exposure Standards - STELs
Not listed.		

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

**Appropriate engineering controls:** No data available

**Individual protection measures, such as personal protective equipment:**

**Respiratory Protection:** No data available

**Respirator Type(s):** NIOSH approved dust mask.

**Eye protection:** Safety glasses recommended.

**Skin protection:** Uniforms, coveralls, or a lab coat should be worn.

**Gloves:** The use of chemically resistant gloves is recommended.

**Other protective equipment:** No data available

**General hygiene conditions:** No data available

## 9. Physical and chemical properties

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

**Physical state:** Powder.

**Color:** White

**Odor:** Starch

**Odor Threshold:** Not available

**pH:** Not available

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

**Melting point/freezing point (°C):**

**Melting Point (°C):** Not available

**Freezing point (°C):** No data available

**Initial boiling point and boiling range** No data available

(°C):

<b>Flash Point (°C):</b>	No data available
<b>Flash Point Method:</b>	Not available
<b>Evaporation Rate:</b>	Not applicable
<b>Flammability (solid, gas):</b>	Not available
<b>Upper/lower flammability or explosive limits:</b>	
<b>Upper flammability or explosive limits:</b>	Not available
<b>Lower flammability or explosive limits:</b>	Not available
<b>Vapor pressure:</b>	Not available
<b>Vapor density:</b>	Not available
<b>Relative density:</b>	1.5000000
<b>Solubility(ies):</b>	Insoluble
<b>Partition coefficient: n-octanol/water:</b>	Not available
<b>Auto-ignition temperature (°C):</b>	No data available
<b>Decomposition temperature (°C):</b>	Not available
<b>Viscosity:</b>	Not available
<b>Heat of decomposition:</b>	Not available
<b>Volatiles by weight:</b>	Not available
<b>Volatile Organic Chemicals:</b>	Not available
<b>Molecular formula:</b>	Not available
<b>Molecular weight:</b>	> 10000
<b>Liquid density:</b>	Not available
<b>VOC (as applied*- 2% by wt hardener-less exempts and water):</b>	NAP or
<b>Bulk Density:</b>	Not available

## 10. Stability and reactivity

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<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 (e.g., static discharge, shock, or vibration):</b>	None known.
<b>Incompatible materials:</b>	No data available
<b>Hazardous decomposition products:</b>	This product does not undergo spontaneous decomposition. Typical

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combustion products are carbon monoxide, carbon dioxide, nitrogen and water.

## 11. Toxicological information

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

**Information on the likely routes of exposure (inhalation, ingestion, skin and eye contact):** Eye Contact, Skin Contact, Inhalation, Ingestion

**Target Organs Potentially Affected by Exposure:** None known.

**Chemical Interactions That Change Toxicity:** None known.

**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:**

**Ingestion Irritation:** No data available

**Ingestion Toxicity:** None known.

**Skin Contact:** Based on available data, the GHS classification criteria are not met. Unlikely to cause harmful effects under recommended conditions of handling and use. Low order of toxicity.

**Absorption:** No data available

**Inhalation Irritation:** No data available

**Inhalation Toxicity:** No data available

**Eye Contact:** Based on available data, the GHS classification criteria are not met.

**Chronic effects:** None known.

**Inhalation:** No data available

**Skin Contact:** No data available

**Skin Absorption:** No data available

**Ingestion:** No data available

**Sensitization:** None known.

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

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

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

**STOT-single exposure:** Based on available data, the GHS classification criteria are not met.

**STOT-repeated exposure:** Not applicable.

**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
No data available			

**12. Ecological information**

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**Ecotoxicity (aquatic and terrestrial, where available):** Low toxicity to aquatic organisms.

**Ecological Toxicity Data:**

Chemical Name	CAS #	Aquatic EC50 Crustacea	Aquatic ERC50 Algae	Aquatic LC50 Fish
No data 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**

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**Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging:** 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.

**14. Transport information**

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# SAFETY DATA SHEET

N-DULGE(TM) 320

## Carriage of dangerous goods by road (DOT), rail or inland waterways:

UN number: No data available  
UN Proper shipping name: Not applicable  
Transport hazard class(es): Not applicable  
Packing group, if applicable: Not applicable  
DOT Basic description: No data available

## International carriage of dangerous goods by sea (IMDG/IMO):

UN number: No data available  
UN Proper shipping name: Not applicable  
Transport hazard class(es): Not applicable  
Packing group, if applicable: Not applicable

## International carriage of dangerous goods by air (IATA):

UN number: No data available  
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)): Not available

Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code): Not available

Special precautions which a user needs to be aware of or needs to comply with in connection with transport or conveyance either within or outside their premises: Consult IMO regulations before transporting in bulk by ocean.

HAZCHEM Code: No data available

## 15. Regulatory information

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### Safety, health and environmental regulations specific for the product in question:

TSCA 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.

### Australia - National Pollutant Inventory (NPI) Substance List:

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Chemical Name	CAS #	Australia - National Pollutant Inventory (NPI) Substance List
No data available		

**Australia - Illicit Drug Precursors/Reagents:**

Chemical Name	CAS #	Australia - Illicit Drug Precursors/Reagents - Category I Substances	Australia - Illicit Drug Precursors/Reagents - Category II Substances	Australia - Illicit Drug Precursors/Reagents - Category III Substances
No data available				

**Australia - Narcotic Drugs Act:**

Chemical Name	CAS #	Australia - Narcotic Drugs Act - Schedule I Drugs	Australia - Narcotic Drugs Act - Schedule II Drugs	Australia - Narcotic Drugs Act - Schedule III Drugs	Australia - Narcotic Drugs Act - Schedule IV Drugs
No data available					

**Australia - Dangerous Goods Code - ADG:**

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

**Australia - The Chemical Weapons (Prohibition) Act (CWC):**

Chemical Name	CAS #	Australia - The Chemical Weapons (Prohibition) Act (CWC) - Schedule 1	Australia - The Chemical Weapons (Prohibition) Act (CWC) - Schedule 2	Australia - The Chemical Weapons (Prohibition) Act (CWC) - Schedule 3
No data available				

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

Revision Date: 12-04-2021  
 Supersedes: 26-05-2020  
 Revision Number: 5



# SAFETY DATA SHEET

N-DULGE(TM) 320

**Reason for revision:**

New

**FOR INFORMATION CONTACT:**

Australia:Ingredion ANZ Pty Ltd

Customer Service : +61-2-9911 1200 (business hours)

**Other Info:**

None known.

**Disclaimer:**

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