

## Section 1 - Identification

**Product identifier:**

Product Number:

Product Name: N-DULGE 316 - 31470300

**Other means of identification:**

Chemical family: 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:	This material does not present a hazard if inhaled. Remove individual to fresh air after an airborne exposure if any symptoms develop, as a precautionary measure.
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. Contributes to effluent BOD. Not considered as hazardous.

**Medical attention and special treatment:**

No further first aid information is available.

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

Suitable extinguishing media:	CO2, Dry Chemical, Foam, Water Fog
Unsuitable extinguishing media:	None known.
<b>Specific hazards arising from the chemical:</b>	Minimum ignition temperature of dust cloud- approx. 390 C. Minimum explosive concentration- approx. 62 mg/l. Minimum energy to ignite cloud by electrical spark- approx. 0.045 joules.
Hazardous combustion products:	Thermal decomposition could produce carbon monoxide, carbon dioxide, and unidentified organic compounds.
<b>Special protective equipment and precautions for firefighters:</b>	Do not enter fire area without proper protection including self- contained breathing apparatus and full protective equipment.

## Section 6 - Accidental release measures

<b>Personal precautions, protective equipment and emergency procedures:</b>	Use personal protective equipment as required.
<b>Environmental precautions:</b>	No data available
<b>Methods and materials for containment and cleaning up:</b>	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. Prohibit smoking and open flames. Avoid sparks or other sources of static electricity.

## Section 7 - Handling and storage

<b>Precautions for safe handling:</b>	As with all chemicals, good industrial hygiene practices should be followed when handling this material.
<b>Conditions for safe storage, including any incompatibilities:</b>	
Safe storage conditions:	Store in a clean, dry, well ventilated warehouse away from odorous materials.
Static Sensitivity:	Yes No special sensitivity.
Other precautions:	Avoid dispersing the powder in the air. Prevent buildup of powder on surfaces. Mechanical handling of the powder on inadequately grounded equipment can result in static electrical discharges.
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. Dust masks should conform to EN 149.

**Thermal hazards:** Not available

**Eye and face protection:** Wear safety glasses. Personal eye protection should conform to EN 166.

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

**Gloves:** Gloves are recommended due to possible irritation., Gloves should conform to EN 374.

**Other protective equipment:** Uniforms, coveralls, or a lab coat should be worn.

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

**Section 9 - Physical and chemical properties**

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

Physical State: Powder

Colour: White

**Odour:** Starch

**Odour Threshold:** Not available

**pH:** Not available

**pH in (1%) Solution:** Not available

**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

<b>Vapour pressure:</b>	Not available
<b>Vapour density:</b>	Not available
<b>Relative density:</b>	No data available
<b>Solubility:</b>	Insoluble
<b>Partition coefficient: n-octanol/water:</b>	Not available
<b>Auto-ignition temperature:</b>	Not available
<b>Decomposition temperature:</b>	Not available
<b>Viscosity:</b>	Not available
<b>Volatiles:</b>	None
<b>Volatile Organic Chemicals:</b>	Not available
<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

<b>Section 10 - Stability and reactivity</b>
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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:</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.

<b>Section 11 - Toxicological information</b>
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**Description of the various toxicological (health) effects and the available data used to identify those effects:**

<b>Information on possible routes of exposure:</b>	None known.
<b>Target Organs Potentially Affected By Exposure:</b>	None known.
<b>Early onset symptoms related to exposure:</b>	No data available
<b>Toxic Effects:</b>	This product is considered as being non-toxic. Use of good industrial hygiene practices is recommended.
<b>Exposure levels and health effects:</b>	
<b>Acute toxicity:</b>	
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.
<b>Skin corrosion/irritation:</b>	Wash skin with soap and water.
<b>Serious eye damage/irritation:</b>	Based on available data, the GHS classification criteria are not met.
<b>Respiratory sensitisation:</b>	Based on available data, the GHS classification criteria are not met.
<b>Skin sensitisation:</b>	Based on available data, the GHS classification criteria are not met.
<b>Germ cell mutagenicity:</b>	Based on available data, the GHS classification criteria are not met.
<b>Reproductive Toxicity:</b>	Based on available data, the GHS classification criteria are not met.
<b>Carcinogenicity:</b>	No.
<b>Specific Target Organ Toxicity (STOT)-single exposure:</b>	Based on available data, the GHS classification criteria are not met.
<b>Specific Target Organ Toxicity (STOT) -repeated exposure:</b>	Based on available data, the GHS classification criteria are not met.
<b>Aspiration hazard:</b>	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:** Low, but has a BOD contribution.

**Ecological Toxicity Data:**

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

**Persistence and degradability:** Readily biodegradable.

**Bioaccumulative potential:** Low (degrades too rapidly)

**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.

<b>Section 15 - Regulatory information</b>
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**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.

**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:** 11-20-2022

**Supersedes:** 11-08-2022

**Revision Number:** 2

**Reason for revision:** New

**FOR INFORMATION CONTACT:** Australia: Ingredion ANZ Pty Ltd  
Customer Service : +61-2-9911 1200 (business hours)

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# Safety Data Sheet

N-DULGE 316 - 31470300

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