

## 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:

National Starch Pty Ltd  
New Zealand Branch  
Unit 5, 706 Great South Road  
Penrose Auckland 1642  
New Zealand  
Tel: +64 9 582 0284 (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 as hazardous in accordance with the Hazardous Substances and New Organisms Act

**Signal Word:**

No signal word needed.

**Hazard Statements:**

No Hazard Statement needed.

**Precautionary Statements:**

No Precautionary Statement needed.

**Hazards not otherwise classified:**

None known.

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

**Substance:**

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

**Mixture:**

Not applicable

**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.

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

**Suitable extinguishing equipment:**

Suitable extinguishing media: CO<sub>2</sub>, Dry Chemical, Foam, Water Fog

Unsuitable extinguishing media: None known.

**Specific hazards arising from the chemical:**

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.

**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. Prohibit smoking and open flames. Avoid sparks or other sources of static electricity.

## 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:

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/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/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.

**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, colour 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

<b>Flash Point:</b>	Not applicable
<b>Flammability (solid, gas):</b>	No
<b>Upper/lower flammability or explosive limits:</b>	
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>Kinematic viscosity:</b>	Not available
<b>Particle Characteristics:</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:

<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.

**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.

**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:**

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

**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.

### 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 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: 02-13-2023  
 Supersedes: 11-20-2022  
 Revision Number: 3



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<b>Reason for revision:</b>	New
<b>Key abbreviations or acronyms used:</b>	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
<b>For Information Contact:</b>	New Zealand: Ingredion ANZ Pty Ltd Customer Service : +64-9-5820284 (Business Hours)

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