

N-Dulge C2

#### Section 1 - Identification Product identifier: Product Number: 06760100 Product Name: N-Dulge C2 modified 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: 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) CHEMTREC - Emergency Telephone (Medical & Transport Incident With **Emergency phone number:** Product-7Davs/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



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## 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.



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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, 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. 70 mg/l. Minimum energy to ignite cloud by electrical spark- approx. 0.06 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.

Section 6 - Accidental release measu	res
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 a Safe storage conditions:	any incompatibilities: Keep container closed when not in use.
Static Sensitivity:	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:	None known



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## 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 exam Respiratory protection:	nple personal protective equipment (PPE): 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 6.5
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

## Appearance (physical state, colour etc.):



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### 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 Characterstics:	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

Acute toxicity - Dermal:

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

Information on possible routes of exposure:	Ingestion, Inhalation, Skin Contact, Eye Contact
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.

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



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Inhalation Toxicity:	Based on available data, the GHS classification criteria are not met.
Skin corrosion/irritation:	Low order of toxicity. 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.

Other adverse effects:

## Section 13 - Disposal considerations



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

### New Zealand Inventory of Chemicals (NZIOC)

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

#### New Zealand - Priority List of Hazardous Substances



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Chemical Name	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
Supercedes:	12-22-2022
Revision Number:	4
Reason for revision:	New



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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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