

N-DULGE(TM) 320

SECTION 1: Identification of the substance/mixture and of the company/undertaking		
<b>1.1 Product identifier:</b> Product Number: Product Name:	06820323 N-DULGE(TM) 320 food starch	
Other means of identification: Chemical family: REACH Registration Number:	Modified starch	
1.2 Relevant identified uses of the subst Relevant identified use:	a <b>nce or mixture and uses advised against:</b> Food products	
Uses advised against:	Not Available	
1.3 Details of the supplier of the safety data sheet:	Ingredion India Pvt Ltd Unit no 1502E, 15th Floor, Rupa Renaissance, Plot no D-33, D207 Juinagar MIDC Road, TTC Industrial Area, Navi Mumbai 400705 Maharashtra, India Tel: +91 22 6820 0600 (business hours)	
1.4 Emergency telephone 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	
Authorised Representative for REACH Registration:	Service: See phone numbers in Section 16 No data available	

**SECTION 2: Hazards identification** 

#### 2.1 Classification of the substance or mixture:

**Classification according to GHS** 

Not classified as hazardous in accordance with GHS Regulation.



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Regulation:	
2.2 Label elements:	
Hazard pictograms:	No hazard symbols required
Signal word:	No signal word needed.
Hazard statements:	No Hazard Statement needed.
Precautionary statements:	No Precautionary Statement needed.
Supplemental Hazard information (EU):	No Supplemental Hazard Information available

2.3 Other hazards:

None known.

#### **SECTION 3: Composition/information on ingredients**

#### 3.1 Substances:

Not applicable

#### 3.2 Mixtures:

Substance Name	Concentration (% by weight)	CAS No.	REACH Registration Number
No hazardous			
components.			

SECTION 4: First aid measures	
4.1 Description of 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.
Self protection of the first aider:	No data available
4.2 Most important symptoms and effects, both acute and delayed:	Possible physical irritant from dust particles. Potential for dust explosion.

## 4.3 Indication of any immediate medical attention and special treatment needed:

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No further first aid information is available.



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SECTION 5: Firefighting measures	
5.1 Extinguishing media:	
Suitable extinguishing media:	Dry Chemical, CO2, Water Fog, Foam
Unsuitable extinguishing media:	None known.
5.2 Special hazards arising from the substance or mixture:	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.
5.3 Advice for firefighters:	Do not enter fire area without proper protection including self- contained breathing apparatus and full protective equipment.

#### SECTION 6: Accidental release measures

#### 6.1 Personal precautions, protective equipment and emergency procedures:

Non-emergency personnel:	
Emergency responders:	Use personal protective equipment as required.
6.2 Environmental precautions:	Not available
6.3 Methods and material 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.
C 4 Defenses to other costions.	

SECTION 7: Handling and storage	
7.1 Precautions for safe handling:	As with all chemicals, good industrial hygiene practices should be followed when handling this material.
7.2 Conditions for safe storage, including Safe storage conditions:	<b>g any incompatibilities:</b> 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
7.3 Specific end use(s):	Food products



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#### SECTION 8: Exposure controls/personal protection

#### 8.1 Control parameters:

	India -	India -	India -
Out of an an Name	Permissible	Permissible	Permissible
Substance Name	Exposure Limits -	Exposure Limits -	Exposure Limits -
	TWAs	STELs	CEILs
No data available			

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

DNEL:	None known.		
PNEC:	None known.		
8.2 Exposure controls: Appropriate engineering controls:	General.		
Individual protection measures, such as personal protective equipment:			
Eye/face protection:	Safety glasses recommended.		
Skin protection:	Skin protection may be required depending on product temperature.		
Hand protection:	Gloves are not normally required for foreseeable conditions of use.		
Respiratory protection:	NIOSH approved dust mask.		
Thermal hazards:	Not available		
Environmental exposure controls:			

Environmental exposure controls:

SECTION 9: Physical and chemical properties		
9.1 Information on basic physical a	and chemical properties:	
Pure Substance or Mixture:	Pure	
Physical state:	Powder	
Colour:	White	
Odour:	Starch	
Odour Threshold:	Not available	
	Net evellete	

# pH:Not availablepH in (1%) Solution:Approximately 6Melting point/freezing point:Not availableMelting Point:Not availableFreezing point:Not availableBoiling point or initial boiling pointNot available



Flash point:	Not applicable	
Evaporation Rate:	Not applicable	
Flammability:	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	
Density and/or relative density:	1.5	
Solubility:	Insoluble	
Partition coefficient n-octanol/water	Not available	
(log value):		
Auto-ignition temperature:	Not available	
Decomposition temperature:	Not available	
Viscosity:	Not applicable	
Volatiles:	None	
Volatile Organic Chemicals:	Not applicable	
Kinematic viscosity:	Not available	
Particle characteristics:	Not applicable	
9.2 Other information:		
Molecular Weight:	> 10000	

#### **SECTION 10: Stability and Reactivity**

10.1 Reactivity:	Not expected to be reactive.
10.2 Chemical stability:	Stable
10.3 Possibility of hazardous reactions:	Hazardous polymerization will not occur.
10.4 Conditions to avoid:	None known
10.5 Incompatible materials:	None known
10.6 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**

#### 11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008:

Information on possible routes of	Eye Contact, Skin Contact, Inhalation, Ingestion
exposure:	
Target Organs Potentially Affected By	Not applicable.



Exposure:	
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.
Reproductive Toxicity:	Based on available data, the GHS classification criteria are not met.
Carcinogenicity:	No.
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):

Substance Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
There is no known toxicity data available for the components or the product.			

#### SECTION 12: Ecological information

12.1 Toxicity:

No information available.



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Substance Name	CAS	No.	Aquatic LC50 Fish	Aquatic ERC50 Algae	Aquatic EC50 Crustacea
No data available					
12.2 Persistence and degrada	ability:	No data	a available		
12.3 Bioaccumulative potenti	al:	No data	a available		
12.4 Mobility in soil:		Unknov	vn		
12.5 Results of PBT and vPvE assessment:	3				
12.6 Endocrine disrupting pro	operties:	None k	nown.		
12.7 Other adverse effects:		None k	nown.		
SECTION 13: Disposal consid	erations				
13.1 Waste treatment method	s:	Dispos	al should be in accordar	nce with local, state or	national legislation.
Empty container warnings:		-	containers may contain		
			gs even after they have	•	
SECTION 14: Transport Inforn	nation				
DOT Classification:		Not reg	ulated		
14.1 UN number:		Not app	blicable		
14.2 UN proper shipping nam	e:	Not app	blicable		
14.3 Transport hazard class(e	es):	Not app	blicable		
		Not on	olicable		
14.4 Packing group:		not app	JICADIE		

14.5. Environmental hazards:No data available14.6 Maritime transport in bulk<br/>according to IMO instruments:No data available14.7 Special precautions for user:Consult IMO regulations before transporting in bulk by ocean.

#### SECTION 15: Regulatory information

15.1 Safety, health and enviro	onmental regulations/legislation specific for the substance or mixture:
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

India - Ozone Depleting Substances - Schedule I:



#### N-DULGE(TM) 320

Substance Name	CAS No.	India - Ozone Depleting Substances - Schedule I
No data available		

#### India - Hazardous Chemical Rules - List of Hazardous and Toxic Chemicals:

Substance Name	CAS No.	India - Hazardous Chemical Rules - List of Hazardous and Toxic Chemicals
No data available		

#### SECTION 16: Other information

Revision Date:	08-06-2024
Supercedes:	08-04-2023
Revision Number:	5
Reason for revision:	New
For Information Contact	India: INGREDION INDIA PVT LTD Customer Service: +91 22 6820 0600

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