

**SECTION 1: Identification of the substance/mixture and of the company/undertaking****1.1 Product identifier:**

Product Number: 06820323  
Product Name: N-DULGE(TM) 320  
food starch

**Other means of identification:**

Chemical family: Modified starch  
REACH Registration Number:

**1.2 Relevant identified uses of the substance or mixture and uses advised against:**

Relevant identified use: 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  
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  
No data available

**Authorised Representative for REACH  
Registration:**

**SECTION 2: Hazards identification****2.1 Classification of the substance or mixture:**

**Classification according to GHS Regulation:**

Not classified as hazardous in accordance with GHS 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:**

No further first aid information is available.

## 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.

### 6.4 Reference to other sections:

## 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 any incompatibilities:

Safe storage conditions: 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

## SECTION 8: Exposure controls/personal protection

### 8.1 Control parameters:

Substance Name	India - Permissible Exposure Limits - TWAs	India - Permissible Exposure Limits - STELs	India - Permissible Exposure Limits - CEILs
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>.

**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:**

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties:

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

**Melting point/freezing point:**

Melting Point: Not available

Freezing point: Not available

**Boiling point or initial boiling point and boiling range:** Not available

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

## SECTION 10: Stability and Reactivity

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

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

<b>Information on possible routes of exposure:</b>	Eye Contact, Skin Contact, Inhalation, Ingestion
<b>Target Organs Potentially Affected By</b>	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.

**Ecological Toxicity Data:**

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

**12.2 Persistence and degradability:** No data available

**12.3 Bioaccumulative potential:** No data available

**12.4 Mobility in soil:** Unknown

**12.5 Results of PBT and vPvB assessment:**

**12.6 Endocrine disrupting properties:** None known.

**12.7 Other adverse effects:** None known.

**SECTION 13: Disposal considerations**

**13.1 Waste treatment 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**

**DOT Classification:** Not regulated

**14.1 UN number:** Not applicable

**14.2 UN proper shipping name:** Not applicable

**14.3 Transport hazard class(es):** Not applicable

**14.4 Packing group:** Not applicable

**Toxic Inhalation Hazard Zone:** No data available

**14.5. Environmental hazards:** No data available

**14.6 Maritime transport in bulk according to IMO instruments:** No data available

**14.7 Special precautions for user:** Consult IMO regulations before transporting in bulk by ocean.

**SECTION 15: Regulatory information**
**15.1 Safety, health and environmental 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:**

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:** 12-22-2022  
**Supercedes:** 11-20-2022  
**Revision Number:** 3  
**Reason for revision:** New  
**For Information Contact** India:  
 INGREDION INDIA PVT LTD  
 Customer Service: +91 22 6820 0600  
**Hazard statements:** No Hazard Statement needed.  
**Precautionary statements:** No Precautionary Statement needed.

**Disclaimer:**

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