

N-DULGE 225

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier:

Product Name: N-DULGE 225

Other means of identification:

Chemical family: Food ingredient

UFI Number:

REACH Registration Number: This product is exempt from REACH

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:

The relevant Ingredion EMEA Company which invoices for the Product – please see Section 16

e-mail address of competent person responsible for the SDS: Regulatory.emea@ingredion.com

1.4 Emergency telephone number: EMERGENCY TELEPHONE: +1 703-741-5970 / 1-800-424-9300

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture:

Classification according to Regulation (EC) No 1272/2008 (CLP): Not classified as hazardous in accordance with CLP

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.

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Supplemental Hazard information (EU): No Supplemental Hazard Information available

ADDITIONAL INFORMATION: Not applicable

2.3 Other hazards: This product can produce a nuisance dust which should be maintained below a time weighted average of 10 mg/m³.
 This substance/mixture contains no components considered to be an endocrine-disrupting substance at levels of 0.1% or higher.
 Not expected to be PBT or vPvB.

SECTION 3: Composition/information on ingredients

3.1 Substances:

Substance Name	Concentration (% by weight)	CAS No.	EC Number REACH Registration Number	Classification according to Regulation (EC) No 1272/2008 (CLP)	M-factor	SCL	ATE	Nanofom Material
This product is not classified as hazardous								

3.2 Mixtures:
 Not applicable

For full text of H-statements, see SECTION 16.

SECTION 4: First aid measures

4.1 Description of 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: Flush eyes with plenty of water for at least 30 minutes retracting eyelids

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Skin Contact:	often. Tilt the head to prevent chemical from transferring to the uncontaminated eye. Get immediate medical attention.
Ingestion:	Wash with soap and water for no less than 15 minutes.
Self protection of the first aider:	No hazard in normal industrial use. Do not induce vomiting. Seek medical attention if symptoms develop. Provide medical care provider with this SDS.
4.2 Most important symptoms and effects, both acute and delayed:	No data available
4.3 Indication of any immediate medical attention and special treatment needed:	Possible physical irritant from dust particles. Particulates may scratch eye surfaces and cause mechanical irritation.
	No further first aid information is available.

SECTION 5: Firefighting measures

5.1 Extinguishing media:

Suitable extinguishing media:	Use methods suitable to fight surrounding fire.
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:	Carbon monoxide, carbon dioxide.
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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:	Non-emergency personnel should be kept clear of the area.
Emergency responders:	Use personal protective equipment as required.

6.2 Environmental precautions:

Not available

6.3 Methods and material for containment and cleaning up:

Prevent the spread of any spill to minimize harm to human health and the environment if safe to do so.

6.4 Reference to other sections:

See section 8 for appropriate personal protective equipment. See section 2 and 7 for additional information on hazards and precautionary measures.

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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.
- 7.1.1 Recommendations for safe handling: Prevent handling of incompatible substance or mixtures. Take measures to prevent fire as well as aerosol and dust generation.
- 7.1.2 Advice on general occupational hygiene: Do not eat, drink and smoke in work areas. Wash hands after use. Remove contaminated clothing and protective equipment before entering eating areas.
- 7.2 Conditions for safe storage, including any incompatibilities:**
- Safe storage conditions: Keep container closed when not in use.
- Special Sensitivity: No special sensitivity.
- Other precautions: Avoid dispersing the powder in the air. Prevent build-up of powder on surfaces.
- Use care to minimise dust generation in normal use conditions.
- Mechanical handling of the powder on inadequately grounded equipment can result in static electrical discharges.
- 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	United Kingdom - Workplace Exposure Limits (WELs) - TWAs	United Kingdom - Workplace Exposure Limits (WELs) - STELs	United Kingdom - Biological Monitoring Guidance Values
Starch (9005-25-8)	10 mg/m ³ TWA (total inhalable) 4 mg/m ³ TWA (respirable)	30 mg/m ³ STEL (calculated, total inhalable); 12 mg/m ³ STEL (calculated, respirable)	No data available

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PNEC:	None known.
8.2 Exposure controls:	
Appropriate engineering controls:	None required under normal handling conditions.
Individual protection measures, such as personal protective equipment:	
Eye/face protection:	Employee must wear splash-proof or dust-resistant safety goggles and a faceshield to prevent contact with this substance.
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:	No respiratory protection is recommended while working with this material. However, if operating conditions create high vapor or mist concentration, use of an approved respirator is recommended.
Thermal hazards:	Not available
Environmental exposure controls:	Avoid runoff into storm sewers and ditches that lead to waterways.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties:

Physical state:	Powder.
Colour:	off-white
Odour and odour threshold:	Starch odour.
pH:	Not available
pH in (1%) Solution:	4 - 7
Melting point/freezing point:	
Melting Point:	Not available
Freezing point:	Not available
Boiling point or initial boiling point and boiling range:	Not 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:	No data available
Solubility:	Not available

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Partition coefficient n-octanol/water (log value):	Not available
Auto-ignition temperature:	Not available
Decomposition temperature:	Not available
Viscosity:	Not available
Volatiles:	None
Volatile Organic Chemicals:	Not available
Kinematic viscosity:	Not available
Particle characteristics:	Not applicable
9.2 Other information:	
Molecular Weight:	Not available

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:	No data available

SECTION 11: Toxicological information

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

Information on possible routes of exposure:	None known.
Target Organs Potentially Affected By Exposure:	None known.
Early onset symptoms related to exposure:	No data available
Toxic Effects:	Not established.
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.

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Inhalation Toxicity:	Based on available data, the GHS classification criteria are not met.
Skin corrosion/irritation:	Based on available data, the GHS classification criteria are not met.
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.
Endocrine disrupting properties:	None of the components have endocrine disrupting properties.

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: Readily biodegradable.

Ecological Toxicity Data:

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

- 12.2 Persistence and degradability:** Readily biodegradable.
- 12.3 Bioaccumulative potential:** Low (degrades too rapidly)
- 12.4 Mobility in soil:** Unknown
- 12.5 Results of PBT and vPvB assessment:** Not expected to be PBT or vPvB.
- 12.6 Endocrine disrupting properties:** None known.

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12.7 Other adverse effects: Contributes to effluent BOD.

SECTION 13: Disposal considerations

13.1 Waste treatment methods: Waste disposal should be in accordance with existing Community, National and local regulations.

Empty container warnings: Empty containers may contain product residue; follow SDS and label warnings even after they have been emptied.

SECTION 14: Transport Information

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 available14.5. Environmental hazards: No data available
14.7 Maritime transport in bulk according to IMO instruments: No data available

14.6 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:

Substance Name	EINECS	SVHC
No data available		

15.2 Chemical Safety Assessment: No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

SECTION 16: Other information

Revision Date: 04-25-2024

Indication of changes: None Known

Abbreviations and acronyms: CAS = Chemical Abstract Service
DNEL= Derivative No Effect Level
EC= European Community

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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

References and sources of data:

Classification according to Regulation (EC) 1272/2008 (CLP), as amended and Regulation (EC) 1907/2006 (REACH), as amended

Hazard statements:

No Hazard Statement needed.

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Classification according to Regulation (EC) Nr. 1272/2008	Classification procedure
Not available	Not available

Precautionary statements:

No Precautionary Statement needed.

Products are manufactured in accordance with EU Law, unless expressly agreed to otherwise, in writing, by the relevant Ingredion company referred to below. The information on the safety data sheets is provided for the purposes of a general health and safety assessment by an industrial user (the "User"). Reference should also be made by the User, to any other specific relevant local or national health, safety, environmental or other applicable legislation, including any import or export regulations relevant to the country in which the User operates - the User will need to check this information for itself. The information provided by the relevant Ingredion company referred to below, does not constitute indication of suitability for specific uses, nor is it legal advice given to the User.

This document is issued on behalf of the Ingredion EMEA Company which is the Supplier invoicing for the Product. The respective details of each of the relevant Supplier companies are as follows:

Ingredion UK Limited; Ingredion House, Manchester Green, 339 Styal Road; Manchester M22 5LW; England; P: +44 (0) 161 435 3200; F: +44 (0) 161 435 3300; Registered in England No. 07315745

Ingredion Germany GmbH; Grüner Deich 110; 20097 Hamburg; Germany; P: +49 (0) 40 23 91 50; F: +49 (0) 40 23 91 51 70; Amtsgericht Hamburg HRB 105432



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Ingredion South Africa (Pty) Ltd; Infinity Office Park, Suite 6, Block C, 2 Robin Close, Meyersdal, 1448, Gauteng; RSA; P: +27 (0) 11 867 9260; F: +27 (0) 11 867 9271; Registration number 2010/013219/07

Ingredion Middle East Branch; Office 03B, Dubai, Dubai Biotechnology and Research Park, Dubai, United Arab Emirates; P: +971 44 53 4288

Rafhan Maize Products Co. Ltd. Rakh Canal East Road PO Box 62, Faisalabad 38060, Punjab, PAKISTAN T: 92-41-854-0121 F: 92-41-871-1016