

1. Identification

Product identifier used on the label: N-DULGE(R) 333

Other means of identification:

Synonyms: None
Chemical family: Modified Starch

Recommended use of the chemical and restrictions on use:

Recommended use: Food products
Restrictions on use: Not Available

Name, address, and telephone number of the chemical manufacturer, importer, or other responsible party:

SUPPLIER

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)

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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

2. Hazard(s) identification

Classification of the chemical in accordance with paragraph (d) of §1910.1200

GHS Classification: Not classified by GHS criteria

Label elements, including precautionary statements:

GHS Hazard Symbols:

No hazard symbols required

Signal Word:

No signal word needed.

Hazard Statements:

No Hazard Statement needed.

Prevention:

No Precautionary Statement needed.

Hazards not otherwise classified:

None known.

3. Composition/information on ingredients

| Chemical Name | CAS # | % |
|---|-------|---|
| This product is not classified as hazardous | | |

4. First-aid measures

Description of necessary measures, subdivided according to the different routes of exposure, i.e., inhalation, skin and eye contact, and ingestion

Inhalation:

Remove to fresh air. Get medical attention if irritation persists.

Eye Contact:

If symptoms develop, obtain medical attention. Remove particles by irrigating with eye wash solution or clean water, holding the eyelids apart.

Skin Contact:

Wash skin with soap and water.

Ingestion:

None required.

Indication of immediate medical

None known.

attention and special treatment needed, if necessary:

Most important symptoms/effects, acute and delayed:

Possible physical irritant from dust particles. Potential for dust explosion.

5. Fire-fighting measures

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. 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.

Special protective equipment and precautions for fire-fighters:

No special procedures are required.

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.

7. Handling and storage

Precautions for safe handling:

Normal precautions for handling chemicals are applicable.

Conditions for safe storage, including any incompatibilities:

Safe storage conditions:

Special Sensitivity:

Not available

Sensitivity to Static Electricity:

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:

No data available

8. Exposure controls/personal protection

Control parameters – exposure standards, biological monitoring:

| Chemical component | New Zealand - Occupational Exposure Limits - TWAs | ACGIH STEL | New Zealand - Occupational Exposure Limits - Ceilings | New Zealand - Occupational Exposure Limits - Biological Exposure Limits |
|--------------------|---|------------|---|---|
| Not listed. | | | | |

Appropriate engineering controls: No data available

Individual protection measures, such as personal protective equipment:

Eye protection: Safety glasses recommended.

Skin protection: Uniforms, coveralls, or a lab coat should be worn.

Gloves: The use of chemically resistant gloves is recommended.

Respiratory Protection: No data available

Respirator Type(s): NIOSH approved dust mask.

Thermal Hazards: Not available

9. Physical and chemical properties

Appearance (physical state, color etc.):

Physical state: Powder.

Color: White

Odor: Starch

Odor Threshold: Not available

pH: Not available

pH in (1%) Solution: Approximately 6

Melting point/freezing point (°C):

Melting Point (°C): Not available

Freezing point (°C): No data available

Initial boiling point and boiling range (°C): No data available

Flash Point (°C): No data available

Flash Point Method: Not available

Evaporation Rate: Not applicable

Flammability (solid, gas): Not available

Upper/lower flammability or explosive limits:

Upper flammability or explosive limits: Not available

Lower flammability or explosive limits: Not available

| | |
|--|-------------------|
| Vapor pressure: | No data available |
| Vapor density: | Not available |
| Relative density: | 1.5000000 |
| Solubility(ies): | Insoluble |
| Partition coefficient: n-octanol/water: | Not available |
| Auto-ignition temperature (°C): | No data available |
| Decomposition temperature (°C): | Not available |
| Viscosity: | Not available |
| VOC (as applied*- 2% by wt hardener-less exempts and water): | NAP or |
| Bulk Density: | Not available |

10. Stability and reactivity

| | |
|--|---|
| Reactivity: | Not expected to be reactive |
| Chemical stability: | Stable |
| Conditions to avoid (e.g., static discharge, shock, or vibration): | None known. |
| Incompatible materials: | No data available |
| Possibility of hazardous reactions: | Hazardous polymerization will not occur. |
| Hazardous decomposition products: | This product does not undergo spontaneous decomposition. Typical combustion products are carbon monoxide, carbon dioxide, nitrogen and water. |

11. Toxicological information

| | |
|---|-------------------|
| Information on the likely routes of exposure (inhalation, ingestion, skin and eye contact): | No data available |
| Symptoms related to the physical, chemical and toxicological characteristics: | No data available |

Delayed and immediate effects and also chronic effects from short- and long-term exposure:

| | |
|------------------------------------|--|
| Acute toxicity: | |
| Ingestion Toxicity: | None known. |
| Inhalation Toxicity: | No data available |
| Skin corrosion/irritation: | Based on available data, the GHS classification criteria are not met. Unlikely to cause harmful effects under recommended conditions of handling and use. Low order of toxicity. |
| Serious eye damage/irritation: | Based on available data, the GHS classification criteria are not met. |
| Respiratory or skin sensitisation: | None known. |

Germ cell mutagenicity: Based on available data, the GHS classification criteria are not met.
Carcinogenicity: Based on available data, the GHS classification criteria are not met.
Reproductive and Developmental Toxicity: Based on available data, the GHS classification criteria are not met.
STOT-single exposure: Based on available data, the GHS classification criteria are not met.
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 |
|-------------------|-----------|-------------|-----------------|
| No data available | | | |

12. Ecological information

Ecotoxicity (aquatic and terrestrial, where available): Low toxicity to aquatic organisms.

Ecological Toxicity Data:

| Chemical Name | CAS # | Aquatic EC50 Crustacea | Aquatic ERC50 Algae | Aquatic LC50 Fish |
|-------------------|-------|------------------------|---------------------|-------------------|
| No data available | | | | |

Persistence and degradability: No data available
Bioaccumulative potential: No data available
Mobility in soil: Unknown
Other adverse effects (such as hazardous to the ozone layer): None known.

13. Disposal considerations

Description of waste residues and information on their safe handling and methods of disposal, including the disposal of any contaminated packaging: Disposal should be in accordance with local, state or national legislation.
Disposal of any contaminated packaging: Empty containers may contain product residue; follow SDS and label warnings even after they have been emptied.
Empty Container Warnings: Empty containers may contain product residue; follow SDS and label warnings even after they have been emptied.

14. Transport information

Carriage of dangerous goods by road (DOT), rail or inland waterways:

UN number: No data available
 UN Proper shipping name: Not applicable
 Transport hazard class(es): Not Applicable
 Packing group, if applicable: Not applicable

International carriage of dangerous goods by sea (IMDG/IMO):

UN number: No data available
 UN Proper shipping name: Not applicable
 Transport hazard class(es): Not applicable
 Packing group, if applicable: Not applicable

International carriage of dangerous goods by air (IATA):

UN number: No data available
 UN Proper shipping name: Not applicable
 Transport hazard class(es): Not applicable
 Packing group, if applicable: Not applicable

Environmental hazards (e.g., Marine pollutant (Yes/No)): Not available

Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code): Not available

Special precautions which a user needs to be aware of or needs to comply with in connection with transport or conveyance either within or outside their premises: Consult IMO regulations before transporting in bulk by ocean.

HAZCHEM Code: No data available

15. Regulatory information

Safety, health and environmental regulations specific for the product in question:

TSCA 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.

| | |
|----------------------|------------|
| HSNO approval number | None known |
|----------------------|------------|

New Zealand Inventory of Chemicals (NZIoC):

| Chemical Name | CAS Number | New Zealand Inventory of Chemicals (NZIoC) |
|-------------------|------------|--|
| No data available | | |

New Zealand - Priority List of Hazardous Substances:

| Chemical Name | CAS Number | New Zealand - Priority List of Hazardous Substances |
|-------------------|------------|---|
| No data available | | |

New Zealand - HSNO - Toxic Substances:

| Chemical Name | CAS Number | New Zealand - HSNO - Toxic Substances |
|-------------------|------------|---------------------------------------|
| No data available | | |

New Zealand - HSNO - Hazardous Gases - Control Codes:

| Chemical Name | CAS Number | New Zealand - HSNO - Hazardous Gases - Control Codes |
|-------------------|------------|--|
| No data available | | |

New Zealand - HSNO - Class 3, 4 and 5 Dangerous Goods - Control Codes:

| Chemical Name | CAS Number | New Zealand - HSNO - Class 3, 4 and 5 Dangerous Goods - Control Codes |
|-------------------|------------|---|
| No data available | | |

16. Other information, including date of preparation or last revision.

| | |
|------------------------------------|--|
| Revision Date: | 31-07-2021 |
| Supercedes: | 30-07-2019 |
| Revision Number: | 3 |
| Reason for revision: | New |
| FOR INFORMATION CONTACT:: | New Zealand: Ingredion ANZ Pty Ltd Customer Service : +64-9-5820284 (Business Hours) |
| Abbreviations and acronyms: | CAS = Chemical Abstract Service DNEL= Derivative No Effect Level EC= European Community EINECS = European Inventory of Existing Chemical Substances |



SAFETY DATA SHEET

N-DULGE(R) 333

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

Disclaimer:

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