



## SAFETY DATA SHEET

### 1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: NOVATION(R) Indulge 3620  
food starch

RECOMMENDED USE: Food products

**SUPPLIER**

Ingredion Singapore Pte Ltd.  
21 Biopolis Road  
#05-21/27 Nucleos  
Singapore 138567  
Tel:+65 6872 6006 (business hours)

**MANUFACTURER**

Ingredion (Thailand) Co., Ltd  
40/14 Moo 12, Bangna-Trad Road,  
Bangplee, Samutprakarn 10540  
Thailand  
Tel: +662-725-0200 (business hours)

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. HAZARDS IDENTIFICATION

<b>GHS Classification:</b>	Not classified by GHS criteria
<b>GHS Signal Word:</b>	No signal word needed.
<b>GHS Hazards:</b>	No Hazard Statement needed.
<b>GHS Safety Precautions:</b>	No Precautionary Statement needed.

**EMERGENCY OVERVIEW**

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

Off-white Powder. Starch Odor

Eye	Particulates may scratch eye surfaces and cause mechanical irritation.
Skin Contact	Low order of toxicity.
Inhalation	This product can produce a nuisance dust which should be maintained below a time weighted average of 10 mg/m3.
Ingestion	Low oral toxicity.

**3. COMPOSITION/INFORMATION ON INGREDIENTS**

CHEMICAL FAMILY                      Starch

COMPONENT	CAS NUMBER	CONCENTRATION (% by weight)
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Not classified as hazardous.

**4. FIRST-AID MEASURES**

EYE	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.
INHALATION	Remove to fresh air. Get medical attention if irritation persists.
INGESTION	None required.

**5. FIREFIGHTING MEASURES**

AUTOIGNITION	Not available
FLASH POINT	Not available
EXTINGUISHING MEDIA	Dry Chemical; CO2; Water Fog; Foam
SPECIAL FIREFIGHTING PROCEDURES	No special procedures are required.
FIRE & EXPLOSION HAZARDS	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.
LOWER EXPLOSION LIMIT (%)	No data available
UPPER EXPLOSION LIMIT (%)	No data available

**6. ACCIDENTAL RELEASE MEASURES**

SPILL AND LEAK PROCEDURES	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.
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For safety and environmental precautions, please review entire Material Safety Data Sheet for necessary information.

**7. HANDLING AND STORAGE**

STORAGE TEMPERATURE	Ambient.
HANDLING/STORAGE	Normal precautions for handling chemicals are applicable.

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SENSITIVITY TO STATIC ELECTRICITY	Yes
SPECIAL SENSITIVITY	Not available
SENSITIVITY TO MECHANICAL IMPACT	No
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.

**8. EXPOSURE CONTROLS/PERSONAL PROTECTION**

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No data available

VENTILATION REQUIREMENTS	General.
EYE PROTECTION REQUIREMENTS	Safety glasses recommended.
GLOVE REQUIREMENTS	Gloves are not normally required for foreseeable conditions of use.
CLOTHING REQUIREMENTS	Not applicable.
CHANGE/REMOVAL OF CLOTHING	Not normally required.
WASH REQUIREMENTS	Wash before eating, drinking, or using toilet facilities.
RESPIRATOR REQUIREMENTS	NIOSH approved dust mask.

**9. PHYSICAL AND CHEMICAL PROPERTIES**

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PURE SUBSTANCE OR MIXTURE	Mixture
PHYSICAL FORM	Powder.
COLOR	Off-white
ODOR	Starch
ODOR THRESHOLD	Not available
MOLECULAR WEIGHT	> 10000
PH AS IS	Not available
pH IN (1%) SOLUTION	Approximately 6
OXIDIZING PROPERTIES	Not applicable
BOILING POINT	Not available
MELTING/FREEZING POINT	Not available
SOLUBILITY IN WATER	Insoluble
PARTITION COEFFICIENT (n-octanol/water)	Not available
VISCOSITY	Not applicable
SPECIFIC GRAVITY (WATER=1)	1.5
EVAPORATION RATE	Not available
VAPOR PRESSURE (mmHg)	Not available
VAPOR DENSITY (air = 1)	Not available
VOLATILES	None
VOLATILE ORGANIC COMPOUNDS	Not applicable
AUTOIGNITION	Not available
FLASH POINT	Not available

**10. STABILITY AND REACTIVITY**

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STABILITY	Stable
STABILITY DETAIL	Material is stable under normal temperatures and pressures.
MATERIALS TO AVOID	None known
CONDITIONS TO AVOID	None known
HAZARDOUS DECOMPOSITION PRODUCTS	This product does not undergo spontaneous decomposition. Typical combustion products are carbon monoxide, carbon

HAZARDOUS POLYMERIZATION CONDITIONS REACTIVITY	dioxide, nitrogen and water. Hazardous polymerization will not occur.  Not expected to be reactive
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**11. TOXICOLOGICAL INFORMATION**

ROUTE OF ENTRY	Eye Contact; Skin Contact; Inhalation; Ingestion
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<b>CARCINOGEN</b>	<u>IARC</u> (group)	<u>NTP Carcinogen</u>	<u>OSHA Substance</u> <u>Specific Regulation</u>
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COMPONENT  
There is no evidence that this product poses a carcinogenic risk under normal conditions of handling and use.

**PRODUCT TOXICOLOGY**  
PRODUCT INFORMATION

No data available

**ACUTE (SHORT TERM) EFFECTS OF EXPOSURE**

EFFECTS OF ACUTE EXPOSURE	Unlikely to cause harmful effects under recommended conditions of handling and use.
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**CHRONIC (LONG TERM) EFFECTS OF EXPOSURE**

EFFECTS OF CHRONIC EXPOSURE	This product is considered as being non-toxic. Use of good industrial hygiene practices is recommended.
TARGET ORGANS	Not applicable.

**12. ECOLOGICAL INFORMATION**

POTENTIAL EFFECT ON ENVIRONMENT	No data available
MOBILITY	Unknown.
PERSISTENCE AND DEGRADABILITY	No data available
POTENTIAL TO BIOACCUMULATE	Unknown.
ECOTOXICITY	No information available.
AQUATIC TOXICITY	None Established

**13. DISPOSAL CONSIDERATIONS**

WASTE 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.

**14. TRANSPORTATION INFORMATION**

This section provided for general information only. The shipping description below may not represent requirements for all modes of transportation, packaging, shipping methods or locations outside of the United States.

FOR MORE COMPLETE TRANSPORTATION REGULATORY INFORMATION PLEASE REFER TO THE SHIPPING DOCUMENTS ACCOMPANYING THE SHIPMENT OF THIS PRODUCT.

<b>DOT CLASSIFICATION</b>	Not regulated
PROPER SHIPPING NAME	Not Applicable
HAZARD CLASS	Not Applicable
U.N. NUMBER	Not applicable
PACKING GROUP	Not Applicable
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<b>ICAO/IATA CLASSIFICATION</b>	Not regulated
PROPER SHIPPING NAME	Not Applicable
HAZARD CLASS	Not Applicable
U.N. NUMBER	Not Applicable
PACKING GROUP	Not Applicable

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<b>IMO/MDG CLASSIFICATION</b>	Not regulated
PROPER SHIPPING NAME	Not Applicable
HAZARD CLASS	Not Applicable
U.N. NUMBER	Not Applicable
PACKING GROUP	Not Applicable

FLASH POINT	Not available
MARINE POLLUTANT NAME	Not available
IMO MFAG	See Tables 1-15 based on symptoms.

The information provided herein may not include the impact of additional regulatory requirements (eg, for materials meeting the definition of a hazardous waste under RCRA, hazardous substances under CERCLA, and/of marine pollutants under CWA or other similar federal, state or local laws) or any associated exceptions or exemptions under regulations applicable to the transport of this material.

**15. REGULATORY INFORMATION**

TSCA	This product is manufactured in compliance with all provisions of the Toxic Substances Control Act, 15 U.S.C. 2601 et. seq.
FDA	21CFR 170.30

**16. OTHER INFORMATION**

ISSUE DATE:	29-January-2020
FOR INFORMATION CONTACT	Singapore: Ingredient Singapore Pte Ltd Customer Service: +65 6872 6006

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<b>GHS Safety Precautions:</b>	No Precautionary Statement needed.
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ADDITIONAL INFORMATION: The information given and the recommendations made herein apply to our product(s) alone and are not combined with other product(s). Such are based on our research and on data from other reliable sources and are believed to be accurate. No guaranty of accuracy is made. It is the purchaser's responsibility before using any product to verify this data under their own operating conditions and to determine whether the product is suitable for their purposes.