

## 1. Product and company identification

**Product identifier:**

Product Number: 32300300  
Product Name: NOVATION INDULGE 3920 - 32300300

**Other means of identification:**

Chemical family: Starch

**Recommended use of the chemical and restrictions on use:**

Recommended use: Food starches (food starch)  
Restrictions on use: Not Available

**Supplier identification:**

Ingredion Korea Incorporated  
14th Floor, Bojeon Building, 725,  
Eonju-ro, Seoul, Korea (06050)  
Tel: +82 (0)2 3485 1421 (business hours)

**Emergency phone 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

**Hazards Classification:**  
**Label elements including precautionary statements:**

**Pictograms:** No hazard symbols required

**Classification according to MoEL  
Notice no. 2013-37:** Not classified as hazardous

**Signal Word:** No signal word needed.

**Hazard Statements:** No Hazard Statement needed.

**Precautionary Statements:** No Precautionary Statement needed.

**Hazard or Risk other than that  
included in the classification criteria  
(e.g., dust explosion hazard):** None known.

### 3. Names and contents of ingredients

Chemical Name	Common name and synonyms	CAS No.	Concentration (% by weight)
No hazardous components.			

### 4. First-aid measures

**Description of necessary 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: 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.

**Most important symptoms and effects, acute and delayed, caused by exposure:** Possible physical irritant from dust particles. Potential for dust explosion. Contributes to effluent BOD. Not considered as hazardous.

**Indication of medical attention and notes for physician:** No further first aid information is available.

## 5. Fire-fighting measures

### Suitable (and unsuitable) extinguishing equipment:

Suitable extinguishing media: CO<sub>2</sub>, Dry Chemical, Foam, Water Fog

Unsuitable extinguishing media: None known.

### Specific hazards arising from the chemical:

Minimum ignition temperature of dust cloud- approx. 390 C. Minimum explosive concentration- approx. 62 mg/l. Minimum energy to ignite cloud by electrical spark- approx. 0.045 joules.

Hazardous combustion products: Thermal decomposition could produce carbon monoxide, carbon dioxide, and unidentified organic compounds.

### Special protective equipment and precautions for fire-fighters:

Do not enter fire area without proper protection including self- contained breathing apparatus and full protective equipment.

## 6. Accidental release measures

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

Use personal protective equipment as necessary

### Environmental precautions and protective procedures:

Not 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. Prohibit smoking and open flames. Avoid sparks or other sources of static electricity.

## 7. Handling and storage

### Precautions for safe handling:

As with all chemicals, good industrial hygiene practices should be followed when handling this material.

### Conditions for safe storage, including any incompatibilities:

Safe storage conditions: Store in a clean, dry, well ventilated warehouse away from odorous materials.

Static Sensitivity: Yes

No special sensitivity.

Other precautions:

Avoid dispersing the powder in the air. Prevent buildup of powder on surfaces.

Mechanical handling of the powder on inadequately grounded equipment can result in static electrical discharges.

Materials to Avoid/Chemical Incompatibility:

None known

## 8. Exposure controls and personal protection

Occupational exposure limit values, biological limit values:

Chemical Name	Korea - ISHA - Occupational Exposure Limits - TWAs	Korea - ISHA - Occupational Exposure Limits - STELs	Korea - ISHA - Occupational Exposure Limits - CEILs
Not available			

This product can produce a nuisance dust which should be maintained below a time weighted average of 10 mg/m<sup>3</sup>.

**Appropriate engineering controls:** General.

**Personal protective equipment:**

**Respiratory protection:** NIOSH approved dust mask. Dust masks should conform to EN 149.

**Eye and face protection:** Wear safety glasses. Personal eye protection should conform to EN 166.

**Skin protection:** Skin protection may be required depending on product temperature.

**Gloves:** Gloves are recommended due to possible irritation., Gloves should conform to EN 374.

**Other protective equipment:** Uniforms, coveralls, or a lab coat should be worn.

**General hygiene conditions:** Wash before eating, drinking, or using toilet facilities.

## 9. Physical and chemical properties

**Appearance (physical state, colour etc.):**

Physical State: Powder.

Colour: White

**Odour:** Starch odor

**Odour Threshold:** Not available

**pH:** Not available 6

**pH in (1%) Solution:** Not available

**Melting point/freezing point:**

Melting Point: Not available

Freezing point: Not available

**Initial boiling point and boiling range:** Not available

**Flash Point:** Not applicable

**Evaporation Rate** Not applicable

**Flammability (solid, gas):** 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**Relative density:** Not available**Solubility:** Insoluble**Partition coefficient: n-octanol/water:** Not available**Auto-ignition temperature:** Not available**Decomposition temperature:** Not available**Viscosity:** Not available**Molecular mass:** Not available**10. Stability and reactivity****Reactivity:** Not expected to be reactive.**Chemical stability:** Stable**Possibility of hazardous reactions:** Hazardous polymerization will not occur.**Conditions to avoid (e.g. static discharge, shock or vibration, etc.):** None known**Incompatible materials:** None known**Hazardous decomposition products:** This product does not undergo spontaneous decomposition. Typical combustion products are carbon monoxide, carbon dioxide, nitrogen and water.**11. Toxicological information****Description of the various toxicological (health) effects and the available data used to identify those effects:****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:** 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 classification criteria are not met.

<b>Acute toxicity - Dermal:</b>	Based on available data, the classification criteria are not met.
<b>Inhalation Toxicity:</b>	Based on available data, the classification criteria are not met.
<b>Skin corrosion/irritation:</b>	Wash skin with soap and water.
<b>Serious eye damage/irritation:</b>	Based on available data, the classification criteria are not met.
<b>Respiratory sensitisation:</b>	Based on available data, the classification criteria are not met.
<b>Skin sensitisation:</b>	Based on available data, the classification criteria are not met.
<b>Germ cell mutagenicity:</b>	Based on available data, the classification criteria are not met.
<b>Carcinogenicity:</b>	None known.
<b>Reproductive Toxicity:</b>	Based on available data, the classification criteria are not met.
<b>Specific Target Organ Toxicity (STOT)-single exposure:</b>	Based on available data, the classification criteria are not met.
<b>Specific Target Organ Toxicity (STOT) -repeated exposure:</b>	Based on available data, the classification criteria are not met.
<b>Aspiration hazard:</b>	Based on available data, the classification criteria are not met.

**Numerical measures of toxicity (such as acute toxicity estimates):**

	<b>LD50 Oral</b>	<b>LD50 Dermal</b>	<b>LC50 Inhalation</b>
There is no known toxicity data available for the components or the product.			

**12. Ecological information**

**Ecotoxicology:** Low, but has a BOD contribution.

**Ecological Toxicity Data:**

<b>Chemical Name</b>	<b>CAS No.</b>	<b>Aquatic LC50 Fish</b>	<b>Aquatic ERC50 Algae</b>	<b>Aquatic EC50 Crustacea</b>
Not available				

**Persistence and degradability:** Readily biodegradable.

**Bioaccumulative potential:** Low (degrades too rapidly)

**Mobility in soil:** Unknown

**Other adverse effects:** None known.

**13. Disposal considerations**

**Disposal methods:** Disposal should be in accordance with local, state or national legislation.

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

## 14. Transport information

**UN number:** Not applicable

**UN Proper shipping name:** Not Applicable

**Transport hazard class:** Not Applicable

**UN Packing group:** Not Applicable

**Toxic Inhalation Hazard Zone:** Not available

**Environmental hazards (e.g., Marine pollutant):** Not available

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

**Special precaution that a user should be aware of or should comply with in connection with transport or conveyance either within or outside the premises:** Consult IMO regulations before transporting in bulk by ocean.

## 15. Regulatory information

### Safety, health and environmental regulations:

**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.

### Industrial Safety and Health Act:

Chemical Name	CAS No.	ISHA - Harmful Substances Requiring Permission	ISHA - Harmful Substances Prohibited for Manufacturing, Importing, Transferring, or Supplying	ISHA - Hazardous Substances Subject to Control - Gas-Phase Substances	ISHA - Hazardous Substances Subject to Control - Acids and Alkalis	ISHA - Hazardous Substances Subject to Control - Metals	ISHA - Hazardous Substances Subject to Control - Organic Compounds

Not available							
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**Toxic Chemical Control Act:**

Chemical Name	CAS No.	MOE - Toxic Chemicals Control Act (TCCA) - Observational Chemicals	MOE - Toxic Chemicals Control Act (TCCA) - Hazard Marks
Not available			

**Dangerous Material Safety Control Act:**

Chemical Name	CAS No.	MPSS - Dangerous Substances - Class 1 Oxidizing Solids	MPSS - Dangerous Substances - Class 2 Flammable Solids	MPSS - Dangerous Substances - Class 3 Spontaneously Combustible Substances and Dangerous Substances when wet	MPSS - Dangerous Substances - Class 4 Flammable Liquids	MPSS - Dangerous Substances - Class 5 Self- Reactive Substances	MPSS Dangerous Substances - Class 6 Oxidizing Liquids
Not available							

**Waste Management Act:**

Chemical Name	CAS No.	MOE - Wastes Control Act – Hazardous Substances in Controlled Wastes
Not available		

**Other requirements in Korea and other countries:**

Chemical Name	CAS No.	Existing Chemicals Inventory (KECI/KECL) - Annex 1	Existing Chemicals Inventory (KECI/KECL) - Annex 2	Existing Chemicals Inventory (KECI/KECL) - Annex 3
Not available				



**Montreal Protocol on Substances that Deplete the Ozone Layer**

Chemical Name	CAS No.	Montreal Protocol on Substances that Deplete the Ozone Layer
Not available		

**Stockholm Convention on Persistent Organic Pollutants**

Chemical Name	CAS No.	Stockholm Convention on Persistent Organic Pollutants
Not available		

**Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade**

Chemical Name	CAS No.	Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade
Not available		

**Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal**

Chemical Name	CAS No.	Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal
Not available		

**16. Other information**

**Revision Date:** 02-24-2023  
**Supersedes:** 11-20-2022  
**Revision Number:** 3  
**Reason for revision:** New  
  
**For Information Contact:** Korea:  
 Ingredion Korea Incorporated  
 Tel: +82 (0)2 3485 1421  
  
**Precautionary Statements:** No Precautionary Statement needed.

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