

**1. Product and company identification****Product identifier:**

Product Number:

Product Name: NOVATION INDULGE 1720 - 31460402

**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. 80 mg/l. Minimum energy to ignite cloud by electrical spark- approx. 0.10 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.

## 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.

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: Yellow

**Odour:** Dextrin odor

**Odour Threshold:** Not available

**pH:** Not available

**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:	Soluble
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.
Acute toxicity - Dermal:	Based on available data, the classification criteria are not met.
Inhalation Toxicity:	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:

<b>TSCA Status:</b>	This product is manufactured in compliance with all provisions of the Toxic Substances Control Act, 15 U.S.C. 2601 et. seq.
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### 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							

### Toxic Chemical Control Act:

# Safety Data Sheet

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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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