

## 1. Identification

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**Product identifier used on the label:** NATIONAL 78-0510

**Other means of identification:**

**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**

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

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SDS Requests and general information, please contact Local Customer Service: See phone numbers in Section 16

## 2. Hazard(s) identification

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**Classification of the chemical in accordance with the Hazard Classification and Communication System of Hazardous Substances B.E. 2555 (2012):**

**GHS Hazard Symbols:** No hazard symbols required

**GHS Classification:** Not Classified by GHS criteria

**Signal Word:** No Signal Word needed.

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

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

**Hazards not otherwise classified:** None known.

## 3. Composition/information on ingredients

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Chemical Name	Common name and synonyms	CAS #	%
No hazardous components.			

## 4. First-aid measures

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**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.

**Most important symptoms/effects, acute and delayed:** Possible physical irritant from dust particles. Potential for dust explosion.

**Indication of immediate medical** None known.

attention and special treatment  
needed, if necessary:

## 5. Fire-fighting measures

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### Suitable (and unsuitable) extinguishing media:

**Suitable extinguishing media:** Dry Chemical, CO<sub>2</sub>, 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

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**Personal precautions, protective equipment and emergency procedures:** Use personal protective equipment as required.

**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

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**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

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OSHA permissible exposure limit (PEL), American Conference of Governmental Industrial Hygienists (ACGIH) Threshold Limit Value (TLV), and any other exposure limit used or recommended by the chemical manufacturer, importer, or employer preparing the safety:

Chemical component	Thailand Exposure Limits (TWAs)	Thailand - Occupational Exposure Limits - STEL's	Thailand Exposure Limits (CEILs)
Not listed.			

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:** No data available

**Individual protection measures, such as personal protective equipment:**

**Respiratory Protection:** No data available

**Respirator Type(s):** NIOSH approved dust mask.

**Eye protection:** Safety glasses recommended.

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

**Gloves:** No data available

**Other protective equipment:** No data available

**General hygiene conditions:** No data available

## 9. Physical and chemical properties

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

**Physical state:** Powder.

**Color:** White

**Odour:** Starch

**Odor Threshold:** Not available

**pH:** Not available

**pH in (1%) Solution:** Approximately 6

**Melting point/freezing point (°C):**

**Melting Point (°C):** Not available

<b>Freezing point (°C):</b>	No data available
<b>Initial boiling point and boiling range (°C):</b>	No data available
<b>Flash Point (°C):</b>	No data available
<b>Flash Point Method:</b>	Not available
<b>Evaporation Rate:</b>	Not applicable
<b>Flammability (solid, gas):</b>	Not available
<b>Upper/lower flammability or explosive limits:</b>	
<b>Upper flammability or explosive limits:</b>	Not available
<b>Lower flammability or explosive limits:</b>	Not available
<b>Vapor pressure:</b>	Not available
<b>Vapor density:</b>	Not available
<b>Relative density:</b>	1.5000000
<b>Solubility(ies):</b>	Insoluble
<b>Partition coefficient: n-octanol/water:</b>	Not available
<b>Auto-ignition temperature (°C):</b>	No data available
<b>Decomposition temperature (°C):</b>	Not available
<b>Viscosity:</b>	Not available
<b>Heat of decomposition:</b>	Not available
<b>Volatiles by weight:</b>	Not available
<b>Volatile Organic Chemicals:</b>	Not available
<b>Molecular formula:</b>	Not available
<b>Molecular weight:</b>	> 10000
<b>Liquid density:</b>	Not available
<b>VOC (as applied*- 2% by wt hardener-less exempts and water):</b>	NAP or
<b>Bulk Density:</b>	Not available

## 10. Stability and reactivity

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<b>Reactivity:</b>	Not expected to be reactive
<b>Chemical stability:</b>	Stable
<b>Possibility of hazardous reactions:</b>	Hazardous polymerization will not occur.
<b>Conditions to avoid (e.g., static discharge, shock, or vibration):</b>	None known.

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<b>Incompatible materials:</b>	No data available
<b>Hazardous decomposition products:</b>	This product does not undergo spontaneous decomposition. Typical combustion products are carbon monoxide, carbon dioxide, nitrogen and water.

## 11. Toxicological information

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### Description of the various toxicological (health) effects and the available data used to identify those effects:

**Information on the likely routes of exposure (inhalation, ingestion, skin and eye contact):** No data available

**Target Organs Potentially Affected by Exposure:** None known.

**Chemical Interactions That Change Toxicity:** None known.

**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:

**Ingestion Irritation:** No data available

**Ingestion Toxicity:** None known.

**Skin Contact:** 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.

**Absorption:** No data available

**Inhalation Irritation:** No data available

**Inhalation Toxicity:** No data available

**Eye Contact:** Based on available data, the GHS classification criteria are not met.

**Chronic effects:** None known.

**Inhalation:** No data available

**Skin Contact:** No data available

**Skin Absorption:** No data available

**Ingestion:** No data available

**Sensitization:** None known.

**Mutagenicity:** 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.

**Carcinogenicity:** 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:** Not applicable.

**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**

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**Ecotoxicity (aquatic and terrestrial, where available):** Not available

**Ecological Toxicity Data:**

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

**Persistence and degradability:** None known.

**Bioaccumulative potential:** No data available

**Mobility in soil:** Unknown

**Other adverse effects (such as hazardous to the ozone layer):** None known.

**13. Disposal considerations**

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**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.

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

## 14. Transport information

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### 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  
DOT Basic description: No data available

### 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.

## 15. Regulatory information

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### 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.

Thailand - Hazardous Substance:

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# SAFETY DATA SHEET

NATIONAL 78-0510

Chemical Name	CAS #	Hazardous Substances	Hazardous Substances - Duties and Civil Liabilities	Hazardous substances - FDA Responsible Substances
No data available				

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

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**Revision Date:** 07-31-2021

**Supersedes:** 09-11-2019

**Revision Number:** 10

**Reason for revision:** New

**FOR INFORMATION CONTACT:** Thailand:  
Ingredion (Thailand) Co., Ltd  
Customer Service: +66-2-725-0200

**Other Info:** None known.

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