



Safety Data Sheet

NATIONAL 104

SECTION 1. Identification of the hazardous chemical or mixture and of the supplier or manufacturer

Name of the dangerous chemical or mixture:

Product number: 12151301
Product name: NATIONAL 104

Other means of identification:

Chemical family: Modified starch

Recommended use of the hazardous chemical or mixture, and restrictions of use:

Recommended use: Food products
Restrictions on use: Not Available

Details of the supplier or manufacturer:

Ingredion Mexico, S.A. of C.V.
Corporate Andares Tower Paseo
Blvd. Puerta de Hierro #5153, Floor 22
Col. Fracc. Plaza Andares, C.P. 45116, Zapopan, Jalisco
Telephone: +52 (33) 3884-9000 (business hours)
Emergency Phone: 800-681-9531 (CHEMTREC) +1-703-741-5970
(Global CHEMTREC)

Phone number in case of emergency:

SECTION 2. Identification of the hazards

Classification of the hazardous chemical or mixture, according to the GHS:

GHS Classification: Not classified as hazardous in accordance with NOM-018-STPS-2015

Elements of signaling, including precautionary advice and precautionary pictograms:

Symbols:

No hazard symbols required

Word of warning:

No signal word needed.

Indication of danger:

No Hazard Statement needed.

Precautionary Statements:

No Precautionary Statement needed.

Other hazards that do not contribute to the classification:

None known.

SECTION 3. Composition / information on the components

For substances:

Not applicable

For mixtures:

Chemical identity of the substance	CAS number	Concentration or concentration ranges
None classified as hazardous under the GHS regulations		

SECTION 4. First aid

Description of first aid:

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

Symptoms and most important effects, acute and chronic: Possible physical irritant from dust particles. Potential for dust explosion.

Indication of the need to receive immediate medical attention and, where appropriate, special treatment: No further first aid information is available.

SECTION 5. Fire-fighting measures

Appropriate extinguishing media:

Suitable extinguishing media:	Dry Chemical, Carbon dioxide, Water Fog, Foam
Unsuitable extinguishing media:	None known.

Specific hazards of hazardous chemical substances or mixtures: 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: This product does not undergo spontaneous decomposition. Typical combustion products are carbon monoxide, carbon dioxide, nitrogen and water.

Special measures to be followed by fire fighting groups: No special procedures are required.

SECTION 6. Measures to be taken in case of accidental spillage or accidental leakage

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

Precautions relating to the environment: Not available

Methods and materials for the containment and cleaning of spills or leaks:

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.

SECTION 7. Handling and storage

Precautions that must be taken to ensure safe handling:

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

Conditions of safe storage, including any incompatibility:

Conditions for safe storage: Keep container closed when not in use.

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: None known

SECTION 8. Exposure controls / personal protection

Control parameters:

Chemical identity of the substance	Mexico - Occupational Exposure Limits - TWAs (LMPE-PPTs)	Mexico - Occupational Exposure Limits - STELs (LMPE-CTs)	Mexico - Occupational Exposure Limits - Ceilings (LMPE-Pico)	Mexico - Occupational Exposure Limits - BEIs (IBE)
No data available				

This product can produce a nuisance dust which should be maintained below a time weighted average of 10 mg/m³.

Appropriate technical controls: General.

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

Eye and face protection: Safety glasses recommended.

Skin protection: Gloves are not normally required for foreseeable conditions of use.

Gloves: Gloves are not normally required for foreseeable conditions of use.

Respiratory Protection: NIOSH approved dust mask.

Thermal hazards: Not available

SECTION 9. Physical and chemical properties

Appearance (physical state, color, etc.):

Pure Substance or Mixture:	Pure
Physical state:	Powder
Color:	White
Odor:	Starch
Odor threshold:	Not available
Hydrogen potential, pH:	Not available
pH in (1%) Solution:	Approximately 6
Melting point / freezing point:	
Melting point:	Not available
Freezing point:	Not available
Initial 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 limit of flammability or explosiveness:	Not available
Lower limit of flammability or explosiveness:	Not available
Vapor pressure:	Not available
Vapor density:	Not available
Relative density:	1.5
Solubility(s):	Soluble in water
N-octanol / water partition coefficient:	Not available
Spontaneous ignition temperature:	Not available
Decomposition temperature:	Not available
Viscosity:	Not applicable
Volatiles:	None
Volatile Organic Chemicals (VOC):	Not applicable
Other relevant information:	
Molecular weight:	> 10000

SECTION 10. Stability and reactivity

Reactivity:	Not expected to be reactive.
Chemical stability:	Stable
Possibility of dangerous reactions:	Hazardous polymerization will not occur.
Conditions to be avoided:	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.

SECTION 11. Toxicological information

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

Information about the probable intake routes: Ingestion, Inhalation, Skin Contact, Eye Contact

Target Organs Potentially Affected by Exposure: Not applicable.

Symptoms related to physical, chemical and toxicological characteristics: No data available

Toxic effects: This product is considered as being non-toxic. Use of good industrial hygiene practices is recommended.

Immediate and delayed effects, as well as chronic effects produced by a short or long term exposure:

Acute Toxicity:

Ingestion Toxicity: Based on available data, the GHS classification criteria are not met.

Acute Toxicity - Dermal: Based on available data, the GHS classification criteria are not met.

Inhalation Toxicity: Based on available data, the GHS classification criteria are not met.

Skin Corrosion / Irritation: Low order of toxicity. Unlikely to cause harmful effects under recommended conditions of handling and use.

Eye Damage / Irritation: Based on available data, the GHS classification criteria are not met.

Respiratory Sensitization: Based on available data, the GHS classification criteria are not met.

Skin Sensitization: Based on available data, the GHS classification criteria are not met.

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: 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 estimates of acute toxicity):

There is no known toxicity data available for the components or the product

Interactive effects: No data available

SECTION 12. Ecotoxicological information

Toxicity: No information available.

Ecological Toxicity Data:

Chemical identity of the substance	CAS number	Aquatic LC50 Fish	Aquatic ERC50 Algae	Aquatic EC50 Crustacea
No data available				

Persistence and degradability: No data available

Bioaccumulation potential: No data available

Mobility in soil: Unknown

Other adverse effects: None known.

SECTION 13. Information regarding the disposal of the products

Description of the waste and information on how to handle it safely and its disposal methods , including the disposal of contaminated containers: 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.

SECTION 14. Transport information

DOT Classification: Not regulated
UN number: Not applicable
Official transportation designation of the United Nations: Not applicable
Class (s) of transportation hazards: Not applicable
Packing group, if applicable: Not applicable
Toxic Inhalation Hazard Zone: No data available

Environmental risks: No data available
Transport in bulk according to Annex II of MARPOL 73/78 and to the IBC Code (IBC).: No data available

Special precautions for the user: Consult IMO regulations before transporting in bulk by ocean.

SECTION 15. Regulatory information

Specific provisions on safety, health and the environment for hazardous chemical substances or mixture in question:

Montreal Protocol on Substances that Deplete the Ozone Layer

Chemical identity of the substance	CAS number	Montreal Protocol on Substances that Deplete the Ozone Layer
No data available		

Stockholm Convention on Persistent Organic Pollutants

Chemical identity of the substance	CAS number	Stockholm Convention on Persistent Organic Pollutants
No data available		

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

Chemical identity of the substance	CAS number	Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade
No data available		

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

Chemical identity of the substance	CAS number	Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal.
No data available		

Mexico - Pollutant Release and Transfer Register

Chemical identity of the substance	CAS number	Reporting Emissions - Threshold Quantities	Reporting Emissions for Manufacturing, Process or Use -Threshold Quantities
No data available			

Mexico - National Inventory of Chemical Substances (INSQ).

Chemical identity of the substance	CAS number	Mexico - National Inventory of Chemical Substances (INSQ).
No data available		



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SECTION 16. Other information including those related to the preparation and updating of the safety data sheets
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Date of SDS preparation or last revision (mm-dd-yyyy): 08-06-2024

For product information, contact For product information, contact:
Ingredion Incorporated Customer Service: 1-800-713-0208

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