

NATIONAL 465

1. Identification Product identifier used on the label: Product number: 06863104 Product name: NATIONAL 465 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 Ingredion Incorporated of the chemical manufacturer, importer, 5 Westbrook Corporate Center or other responsible party: Westchester, IL. 60154, USA Phone: 708-551-2600 (business hours) **Emergency phone number:** MEDICAL: 1-866-374-2659 (Health & Safety Call Center - 24 hours) TRANSPORT: 1-800-424-9400 (CHEMTREC - 24 hours) 2. Hazard(s) identification

Classification of the chemical in accordance with paragraph (d) of §1910.1200:

| GHS Hazard Symbols: | No hazard symbols required | |
|-----------------------------------|--|--|
| GHS Classification: | Combustible Dust Category 1 | |
| Signal Word: | Warning | |
| Hazard Statements: | May form combustible dust concentrations in air. | |
| Precautionary Statements: | No Precautionary Statement needed. | |
| Hazards not otherwise classified: | None known. | |

3. Composition/information on ingredients

| Chemical Name | CAS # | Concentration (% by weight) |
|--|-------|--------------------------------|
| None classified as hazardous under the OSHA Hazard Communication Standard (29CFR 1910.1200). | | |



NATIONAL 465

4. First-aid measures

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: | 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 attention and special treatment needed, if necessary: | No further first aid information is available. |

5. Fire-fighting measures

Suitable (and unsuitable) extinguishing media:

| Suitable extinguishing media: | Dry Chemical, Carbon dioxide, Water Fog, Foam |
|---|---|
| Unsuitable extinguishing media: | None known. |
| Specific hazards arising from the chemical (e.g., nature of any hazardous combustion products): | Minimum ignition temperature of dust cloud- approx. 390 C. Minimum explosive concentration- approx. 70 mg/l. Minimum energy to ignite cloud by electrical spark- approx. 0.06 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

| 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 | |

Precautions for safe handling: As with all chemicals, good industrial hygiene practices should be followed



NATIONAL 465

| when handling this material. |
|--|
| ny incompatibilities: Keep container closed when not in use. |
| Yes |
| Use care to minimize dust generation in normal use conditions. |
| Avoid dispersing the powder in the air. Prevent buildup of powder on surfaces. |
| None known |
| |

when hendling this meterial

8. Exposure controls/personal protection

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 data sheet, where available.:

| Chemical Name | OSHA PEL | ACGIH TLV-TWA | AIHA Exposure limits |
|-------------------|----------|---------------|----------------------|
| No data available | | | |
| | | | |

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

Appropriate engineering controls:General.Individual protection measures, such as
Personal protective equipment:Respiratory Protection:NIOSH approved dust mask.Eye protection:Chemical safety glasses.Skin protection:Gloves are not normally required for foreseeable conditions of use.Gloves:Gloves are not normally required for foreseeable conditions of use.Other protective equipment:Not normally required. Not applicable.General hygiene conditions:Wash before eating, drinking, or using toilet facilities.

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 |
| pH: | Not available |



NATIONAL 465

| pH in (1%) Solution: | Approximately 6 |
|--|-----------------|
| Melting point/freezing point: | |
| Melting Point (°C): | Not available |
| Freezing point (°C): | 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 li | mits: |
| Upper flammability or explosive limits: | Not available |
| Lower flammability or explosive limits: | Not available |
| Vapor pressure: | Not available |
| Vapor density: | Not available |
| Relative density: | 1.5 |
| Solubility(ies): | Insoluble |
| Partition coefficient: n-octanol/water: | Not available |
| Auto-ignition temperature: | Not available |
| Decomposition temperature: | Not available |
| Viscosity: | Not applicable |
| Volatiles: | None |
| Volatile Organic Chemicals (VOC): | Not applicable |

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): | 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 the likely routes of exposure (inhalation, ingestion, skin and eye contact):

Ingestion, Inhalation, Skin Contact, Eye Contact



NATIONAL 465

| Target Organs Potentially Affected by Exposure: | Not applicable. |
|---|---|
| Symptoms related to the 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. |
| Delayed and immediate effects and also | chronic effects from short- and long-term exposure: |
| Acute Toxicity: | |
| Acute Toxicity - Oral: | 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. |
| Acute Toxicity - Inhalation: | Based on available data, the GHS classification criteria are not met. |
| Skin Corrosion / Irritation: | Low order of toxicity. |
| 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. |
| Germ Cell Mutagenicity: | Based on available data, the GHS classification criteria are not met. |
| Reproductive Toxicity: | No. |
| Carcinogenicity: | No. |
| 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 acute toxicity estimates):

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

Has the chemical been classified as a Carcinogen by NTP, IARC or OSHA:

| Chemical Name | OSHA Carcinogen | IARC Carcinogen | NTP Carcinogen |
|-------------------------------|-----------------|-----------------|----------------|
| There are no components | | | |
| that are known or reported to | | | |
| cause cancer | | | |

12. Ecological information

Ecotoxicity (aquatic and terrestrial, where available):

No information available.



NATIONAL 465

| Component toxicity data: | | | | | |
|--|-------------|--|--------------------------|---------------------------|--|
| Chemical Name | CAS # | Aquatic LC50 Fish | Aquatic ERC50 Algae | Aquatic EC50 Crustacea | |
| No data available | | | | | |
| Persistence and degradability: | | No data available | | | |
| Bioaccumulative potential: | | No data available | | | |
| Mobility in soil: | | Unknown | | | |
| Other adverse effects (such as hazardous to the ozone layer): | None | None known. | | | |
| 3. Disposal considerations | | | | | |
| Description of waste residues ar information on their safe handlir methods of disposal, including t disposal of any contaminated packaging: | ng and | sal should be in accordar | nce 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 | | | | | |
| DOT Classification: | Not re | gulated | | | |
| UN number: | | Not applicable | | | |
| UN proper shipping name: | | Not applicable | | | |
| Transport hazard class(es): | Not ap | Not applicable | | | |
| Packing group, if applicable: | | Not applicable | | | |
| Toxic Inhalation Hazard Zone: | No da | No data available | | | |
| Environmental hazards (e.g., Ma pollutant (Yes/No)): | rine No da | No data available | | | |
| Transport in bulk (according to A II of MARPOL 73/78 and the IBC Code): | Annex No da | No data available | | | |
| Special precautions which a use needs to be aware of, or needs t comply with, in connection with transport or conveyance either w or outside their premises: | 0 | Consult IMO regulations before transporting in bulk by ocean. | | | |



NATIONAL 465

15. Regulatory information

| Safety, health and environmental regulations specific for the product in question: | | | | | | |
|---|------------------------------|---|--|--|--|--|
| TSCA Status: | | uct is manufactured in compliance with all provisions of the Toxic es Control Act, 15 U.S.C. 2601 et. seq. | | | | |
| FDA | 21CFR17 | 2.892 | | | | |
| SARA - Section 313 (Superfund Amendments and Reauthorization Act of 1986 - 40CFR 372) | | | | | | |
| Chemical Name | CAS # | Concentration | | | | |
| | | (% by weight) | | | | |
| Contains no substances at or above the reporting threshold under Section 313. | | | | | | |
| California Proposition 65 WARNING: This product cont birth defects or other reproduct | 6 | als that are known to the State of California to cause cancer, | | | | |
| Unless a concentration is spe | cified in Section 2 of the S | DS, the below chemical/s are present in trace amounts. | | | | |
| Chemical Name | CAS # | | | | | |
| None reportable | | | | | | |
| | | | | | | |
| 16. Other information, including date of preparation or last revision. | | | | | | |
| | | | | | | |
| Date of SDS preparation or revision (mm-dd-yyyy): | last 08-06-2024 | | | | | |

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

Ingredion Incorporated and the Ingredion group of companies does not make any warranty or representation respecting the accuracy or completeness of the data. We assume no responsibility for any liability or damages relating thereto, or for advising you regarding the protection of your employees, customers, or others. You should make your own determination regarding the applicability of such information to, or the suitability of any products for your specific use. Ingredion Incorporated and the Ingredion group of companies expressly disclaims all warranties, expressed or implied, including but not limited to, warranties of merchantability, accuracy, fitness for use or for a particular purpose, and noninfringement. The United Nations Convention on Contracts for the International Sale of Goods shall not apply to sales of products by Ingredion Incorporated and the Ingredion group of companies. The INGREDION mark and logo are trademarks of the Ingredion group of companies.