

Safety Data Sheet

Prepared in accordance with Commission Regulation (EU) 2015/830



Revision Date: 21-07-2021

This document replaces SDS dated: None

NOVATION 4600

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier: NOVATION 4600

Other means of identification:

Cas No.: 9037-22-3

REACH Registration No.: This product is exempt from REACH

Chemical family: Starch

1.2 Relevant identified uses of the substance or mixture and uses advised against:

Relevant identified uses: food starch

Uses advised against: Not Available

1.3 Details of the Supplier of the Safety Data Sheet:

The relevant Ingredion EMEA Company which invoices for the Product – please see Section 16

Email of person responsible for Safety Data Sheets: elizabeth.fawkes@ingredion.com

1.4 Emergency telephone number:

EMERGENCY TELEPHONE: +1 703-741-5970 / 1-800-424-9300

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture:

Classification according to Regulation (EC) No 1272/2008 [CLP]: Not classified as hazardous in accordance with CLP

2.2 Label elements:

Labelling according to Regulation (EC) No 1272/2008 [CLP]:

Hazard pictograms: No hazard symbols required

Signal Word: No Signal Word needed.

Hazard Statements: No Hazard Statement needed.

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Precautionary Statements: No Precautionary Statement needed.

Supplemental Hazard information (EU): None known.

2.3. Other hazards

DUST

Nuisance dust with a possibility of dust explosion.

EYE

Particulates may scratch eye surfaces and cause mechanical irritation.

SKIN CONTACT

Low order of toxicity.

INHALATION

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

INGESTION

No hazard in normal industrial use.

SECTION 3: Composition/information on ingredients

3.1 Substances:

Chemical Name	%	CAS #	EC No. REACH Registration No.	Classification (EC) No 1272/2008	M Factor	SCL	Acute Toxicity Estimates
This product is not classified as hazardous							

3.2 Mixtures:

Not applicable

For full text of H-statements see Section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures:

Inhalation:

Remove patient from exposure.

Eye contact:

If symptoms develop, obtain medical attention. Remove particles by

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Skin Contact:	irrigating with eye wash solution or clean water, holding the eyelids apart. Wash skin with soap and water.
Ingestion:	None required.
Self protection of the first aider:	No data available
4.2 Most important symptoms and effects, both acute and delayed:	Possible physical irritant from dust particles.
4.3 Indication of any immediate medical attention and special treatment needed:	None known.

SECTION 5: Firefighting measures

5.1 Extinguishing media:

Suitable extinguishing media: Carbon dioxide (CO₂), Dry Chemical., Foam., Water Fog.

Unsuitable extinguishing media: None known.

5.2 Special hazards arising from the substance or mixture:

Fire and/or Explosion Hazards: 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: Thermal decomposition could produce carbon monoxide, carbon dioxide, and unidentified organic compounds.

5.3 Advice for firefighters: No special procedures are required.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:

Non-emergency personnel: Non-emergency personnel should be kept clear of the area

Emergency responders: Use personal protective equipment as required.

6.2 Environmental precautions: Not applicable

6.3 Methods and material for containment and cleaning up:

Small spills: Refer to information provided for large spills

Large spills: 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.

6.4 Reference to other sections: See Section 8 for appropriate personal protective equipment. See Sections 2

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and 7 for additional information on hazards and precautionary measures.

SECTION 7: Handling and storage

- 7.1 Precautions for safe handling:** As with all chemicals, good industrial hygiene practices should be followed when handling this material.
- 7.2 Conditions for safe storage, including any incompatibilities:**
- Conditions for safe storage:** Store in a clean, dry, well ventilated warehouse away from odorous materials.
- Special Sensitivity:** No special sensitivity.
- Sensitivity to Static Electricity:** Yes
- Other precautions:** Use care to minimise dust generation in normal use conditions.
Avoid dispersing the powder in the air. Prevent build-up of powder on surfaces.
- Materials to avoid:** None known.
- Materials to Avoid/Chemical Incompatibility:** No data available
- 7.3 Specific end use(s):** food starch

SECTION 8: Exposure controls/personal protection

8.1 Control parameters:

Occupational Exposure limit values:

COMPONENT	EXPOSURE LIMITS	EC INDICATIVE OCCUPATIONAL EXPOSURE LIMIT VALUES
Starch	10 mg/m ³ TWA (total inhalable) 4 mg/m ³ TWA (respirable)	Not available

DNEL: None known.

PNEC: None known.

8.2 Exposure controls:

Appropriate engineering controls: No data available

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Individual protection measures, such as personal protective equipment:

Eye and face protection:	Personal eye protection should conform to EN 166. Wear safety glasses.
Skin Protection:	
Hand protection:	Protective clothing is normally not necessary for foreseeable conditions of use.
Other skin protection:	Uniforms, coveralls, or a lab coat should be worn.
Respiratory Protection:	No data available
Respirator Type(s):	Dust masks should conform to EN 149. Use approved dust mask.
Other Protective Equipment:	Wash before eating, drinking, or using toilet facilities.
General Hygiene Conditions:	Not available
Thermal Hazards:	Not available
Environmental exposure controls:	Avoid runoff into storm sewers and ditches that lead to waterways.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties:

Appearance:	Powder.
Colour:	white
Odour:	Starch odour.
Odour threshold:	Not available
pH:	Not available
Melting Point/Freezing Point (°C):	
Melting point (°C):	Not available
Freezing point (°C):	No data available
Initial boiling point and boiling range (°C):	No data available
Flash point:	No data available
Flash point method:	Not available
Evaporation Rate (water = 1):	Not applicable
Flammability (solid, gas):	Not available

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Upper/lower flammability or explosive limits:

Upper flammable or explosive limit, % in air: Not available

Lower flammable or explosive limit, % in air: Not available

Vapour pressure: Not available

Vapour Density (Air=1): Not available

Relative density (water = 1): Not available

Solubility(ies): Soluble

Partition coefficient: n-octanol/water: Not available

Auto-ignition temperature (°C): No data available

Decomposition temperature (°C): Not available

Viscosity: Not available

Explosive properties: Not available

Oxidizing properties: Not available

9.2 Other information:

Solids: Not available

Volatiles: None

Volatile Organic Compounds: Not available

SECTION 10: Stability and reactivity

10.1 Reactivity: Not expected to be reactive

10.2 Chemical stability: Material is stable under normal temperatures and pressures.

10.3 Possibility of hazardous reactions: Hazardous polymerization will not occur.

10.4 Conditions to avoid: None known.

10.5 Incompatible materials: No data available

10.6 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

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11.1 Information on toxicological effects:

Acute toxicity:

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

Skin corrosion/irritation:

Based on available data, the GHS classification criteria are not met.
Low order of toxicity.

Serious eye damage/irritation:

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

Respiratory or skin sensitisation:

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.

Carcinogenicity:

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

Reproductive toxicity:

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

STOT-single exposure:

Not available

STOT-repeated exposure:

Not available

Aspiration hazard:

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

SECTION 12: Ecological information

12.1 Toxicity:

None expected

Ecological Toxicity Data:

Chemical Name	CAS #	Aquatic EC50 Crustacea	Aquatic ERC50 Algae	Aquatic LC50
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No ecotoxicity data available				
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- 12.2 Persistence and degradability:** Readily biodegradable.
12.3 Bioaccumulative potential: No data available
12.4 Mobility in soil: Unknown
12.5 Results of PBT and vPvB assessment: Not expected to be PBT or vPvB.
12.6 Other adverse effects: Contributes to effluent BOD.
12.7 Additional information: No data available

SECTION 13: Disposal considerations

- 13.1 Waste treatment methods:**
- Disposal methods:** Waste disposal should be in accordance with existing Community, National and local regulations.
- Empty Container Warnings:** Not needed.

SECTION 14: Transport information

International carriage of dangerous goods by road (ADR), rail or inland waterways:

- 14.1 UN number:** Not Applicable
14.2 UN proper shipping name: Not applicable
14.3 Transport hazard class(es): Not Applicable
14.4 Packing group: Not applicable

International carriage of dangerous goods by sea (IMDG/IMO):

- 14.1 UN number:** Not Applicable
14.2 UN proper shipping name: Not applicable
14.3 Transport hazard class(es): Not applicable
14.4 Packing group: Not applicable

International carriage of dangerous goods by air (IATA):

- 14.1 UN number:** Not Applicable

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- 14.2 UN proper shipping name: Not Applicable
- 14.3 Transport hazard class(es): Not applicable
- 14.4 Packing group: Not applicable
- 14.5 Environmental hazards: Not available
- 14.6 Special precautions for user: Consult IMO regulations before transporting in bulk by ocean.
- 14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code: Not available

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture:

Chemical Name	EC No.	SVHC
None of the components are listed on this regulatory list		

- 15.2 Chemical Safety Assessment No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

SECTION 16: Other information

Revision Date: 21-07-2021

Indication of changes: None known.

Abbreviations and acronyms:

- CAS = Chemical Abstract Service
- DNEL= Derivative No Effect Level
- EC= European Community
- EINECS = European Inventory of Existing Chemical Substances
- MSHA = Mine Safety Health Administration
- NIOSH = National Institute of Occupational Safety & Health
- OEL = Occupational Exposure Limit
- PBT= Persistent, Bioaccumulative, Toxic
- PNEC= Predicted No Effect Concentration
- SCOEL= Scientific Committee on Occupational Exposure Limits
- TLV = Threshold Limit Value

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TWA= Time Weighted Average
vPvB= Very Persistent, Very Bioaccumulative
Wt.% = Weight Percent

Hazard phrase(s) referenced in section 3 No data available

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Classification according to Regulation (EC) Nr. 1272/2008	Classification procedure
Not available	Not available

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Ingredion UK Limited; Ingredion House, Manchester Green, 339 Styal Road; Manchester M22 5LW; England; P: +44 (0) 161 435 3200; F: +44 (0) 161 435 3300; Registered in England No. 07315745

Ingredion Germany GmbH; Grüner Deich 110; 20097 Hamburg; Germany; P:

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+49 (0) 40 23 91 50; F: +49 (0) 40 23 91 51 70; Amtsgericht Hamburg HRB 105432

Ingredion South Africa (Pty) Ltd; Infinity Office Park, Suite 6, Block C, 2 Robin Close, Meyersdal, 1448, Gauteng; RSA; P: +27 (0) 11 867 9260; F: +27 (0) 11 867 9271; Registration number 2010/013219/07

Ingredion Middle East Branch; Office 03B, Dubai, Dubai Biotechnology and Research Park, Dubai, United Arab Emirates; P: +971 44 53 4288

Rafhan Maize Products Co. Ltd. Rakh Canal East Road PO Box 62, Faisalabad 38060, Punjab, PAKISTAN T: 92-41-854-0121 F: 92-41-871-1016