

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

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|-------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------|
| 1.1. Product identifier | NOVATION Lumina 600 |
| 1.2. Relevant identified uses of the substance or mixture and uses advised against | food starch |
| 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 |
| E-Mail Address | elizabeth.fawkes@ingredion.com |
| 1.4. Emergency telephone number | EMERGENCY TELEPHONE: +32 3 575 5555 |

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

| | |
|-----------------------------------------------------------------------|-----------------------------------------------------------------------------|
| Classification according to Regulation (EC) No 1272/2008 [CLP] | This product is not classified as hazardous according to (EC) No. 1272/2008 |
|-----------------------------------------------------------------------|-----------------------------------------------------------------------------|

2.2. Label elements

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

| | |
|---------------------------------------------|----------------------------------------------|
| Hazard Statements | Not Applicable |
| Supplemental Hazard information (EU) | No Supplemental Hazard Information available |

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/m ³ . |
| INGESTION | No hazard in normal industrial use. |

SECTION 3: Composition/information on ingredients

3.1. Substances

Not Applicable

3.2. Mixtures

| Chemical Name | Percentage (%) | CAS number | Reach Registration No. | Classified in accordance with (EC) No. 1272/2008 |
|---------------|----------------|------------|------------------------|--------------------------------------------------|
| | | | | |



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|---------------------------------------------|--|--|--|--|
| This product is not classified as hazardous | | | | |
|---------------------------------------------|--|--|--|--|

See Section 16 for full text of hazard statements.

SECTION 4: First aid measures

4.1. Description of first aid measures

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|-------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------|
| Inhalation | Remove patient from exposure. |
| 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. |
| Self-protection of the first aider | Not available |

4.2. Most important symptoms and effects, both acute and delayed

| | |
|----------------|-------------------------------------------------|
| Symptom | Possible physical irritant from dust particles. |
|----------------|-------------------------------------------------|

4.3. Indication of any immediate medical attention and special treatment needed

| | |
|-------------------------------|------------------------------------------------|
| Notes to the physician | No further first aid information is available. |
|-------------------------------|------------------------------------------------|

SECTION 5: Firefighting measures

5.1. Extinguishing media

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|--------------------------------|---------------------------------|
| Suitable extinguishing media | CO2 Dry Chemical Foam Water Fog |
| Unsuitable Extinguishing Media | None known. |

5.2. Special hazards arising from the substance or mixture

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|-------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| 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

| | |
|--------------------------------------|-------------------------------------|
| Fire Fighting Methods and Protection | No special procedures are required. |
|--------------------------------------|-------------------------------------|

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

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| For non-emergency personnel | Non-emergency personnel should be kept clear of the area. |
|-----------------------------|-----------------------------------------------------------|

For emergency responders Use personal protective equipment as required.

6.2. Environmental precautions Not available

6.3. Methods and material 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.

6.4. Reference to other sections See Section 8 for appropriate personal protective equipment. See Sections 2 and 7 for additional information on hazards and precautionary measures.

SECTION 7: Handling and storage

7.1. Precautions for safe handling Store in a clean, dry, well ventilated warehouse away from odorous materials.

7.2. Conditions for safe storage, including any incompatibilities Ambient. Store in a clean, dry, well ventilated warehouse away from odorous materials.

Special Sensitivity: No special sensitivity.

Sensitivity to Mechanical Impact: No

Impact:

Sensitivity to Static Electricity: Yes

Electricity:

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.

7.3. Specific end use(s) food starch

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Occupational Exposure Limits (TWA)

| 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 |

8.2. Exposure controls

Appropriate Engineering controls General.

Personal protective equipment

- **Eye protection:** Wear safety glasses. Personal eye protection should conform to

| | |
|----------------------------------------|-------------------------------------------------------------------------------------|
| | EN 166. |
| - Skin protection: | |
| - Hand protection: | Gloves are recommended due to possible irritation. Gloves should conform to EN 374. |
| Other skin protection: | Uniforms, coveralls, or a lab coat should be worn. |
| Respiratory Protection: | Use approved dust mask. |
| | Dust masks should conform to EN 149. |
| Other Protective Equipment: | Wash before eating, drinking, or using toilet facilities. |
| General Hygiene Conditions: | Not available |
| - Thermal hazards | Not available |
| Environmental exposure controls | Not available |

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

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|--------------------------------------------------|-------------------|
| Physical state | Powder. |
| Colour | white |
| Odour | Starch odour. |
| Odour threshold | Not available |
| pH | Not available |
| Melting point / Freezing point (°C) | Not available |
| Initial boiling point and boiling range | Not available |
| Flash point | Not available |
| Evaporation Rate | Not available |
| Flammability (solid, gas) | No |
| Upper Flammable/Explosive Limit, % in air | Not available |
| Lower Flammable/Explosive Limit, % in air | Not available |
| Vapour pressure at 50°C (kPa) | Not available |
| Vapour density | Not available |
| Relative Density | Not available |
| Relative Density at 20° C | No data available |
| Solubility(ies) | Soluble |
| Partition coefficient: n-octanol/water | Not available |
| Auto-ignition temperature | Not available |
| Decomposition temperature | Not determined. |
| Viscosity | Not available |

Explosive Properties Not available
Oxidising Properties Not applicable

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 None known.
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

11.1. Information on toxicological effects

Acute toxicity;
Not available

Skin corrosion/irritation;
Low order of toxicity.
Based on available data, the GHS classification criteria are not met.

Serious eye damage/irritation;
Particulates may scratch eye surfaces and cause mechanical irritation.
Based on available data, the GHS classification criteria are not met.

Respiratory or skin sensitization;
Not available

Germ cell mutagenicity;
Not available

Carcinogenicity;
Not available

Reproductive toxicity;
Not available

STOT-single exposure;
Not available

STOT-repeated exposure;
Not available

Aspiration hazard;
Not available

SECTION 12: Ecological information

| | |
|-------------------------------------------------|----------------------------------|
| 12.1. Toxicity | Low, but has a BOD contribution. |
| 12.2. Persistence and degradability | Readily biodegradable. |
| 12.3. Bioaccumulative potential | Unknown. |
| 12.4. Mobility in soil | Unknown. |
| 12.5. Results of PBT and vPvB assessment | Not available |
| 12.6. Other adverse effects | Contributes to effluent BOD. |
| 12.7. Additional Information | Not available |

SECTION 13: Disposal considerations

13.1. Waste treatment methods

| | |
|----------------------------------|-------------------------------------------------------------------------------------------------|
| Waste Disposal Methods: | Waste disposal should be in accordance with existing Community, National and local regulations. |
| Empty Container Warnings: | Not needed. |

SECTION 14: Transport information

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|-----------------------------------------|------------------------------|
| IATA CLASSIFICATION | Not classified as dangerous. |
| 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 |

IMDG CLASSIFICATION Not classified as dangerous.

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

ADR/RID Not classified as dangerous.

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

14.5. Environmental hazards Not available

14.6. Special precautions for user Not available

14.7. Transport in bulk according to Annex II of MARPOL73/78 and the IBC Code Not available

SECTION 15: Regulatory information

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

EINECS Unknown.

SPECIFIC PROVISIONS Not available

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

SECTION 16: Other information

Abbreviations and acronyms No data available

Key literature references and sources for data 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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|---------------------------------------------|-----------------------------------------------------------------------|
| Section 3 H Phrase(s) | Not available |
| For regulatory information, Contact: | elizabeth.fawkes@ingredion.com EMERGENCY TELEPHONE: +32 3 575 5555 |
| Changes since previous issue | Section 1 Section 16 |

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This document is issued on behalf of the Ingredion EMEA Company which is the Supplier invoicing for the Product. The respective details of each of the relevant Supplier companies are as follows:

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