

1. Identification	
Product i dan (10)	
Product identifier:	
Product Number:	06400301
Product Name:	NOVELOSE(R) 3490
	modified food starch
Other means of identification:	
Chemical family:	Modified starch
Recommended use of chemical an	d restrictions on use:
Recommended use:	Food products
Destrictions on user	Not Available
Restrictions on use:	Not Available
Supplier's details:	Ingredion Singapore Pte Ltd.
	21 Biopolis Road
	#05-21/27 Nucleos
	Singapore 138567
	Tel:+65 6872 6006 (business hours)
Emergency phone number:	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
	SDS Requests and general information, please contact Local Customer
	Service: See phone numbers in Section 16



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Classification according to Regulation: SS 586: Part 2: 2014:

Hazard pictograms:	No hazard symbols required
GHS Classification of the substance or mixture:	Not classified by GHS criteria
Signal Word:	No signal word needed.
Hazard Statements:	No Hazard Statement needed.
Precautionary Statements:	No Precautionary Statement needed.
Other hazards which do not result in classification:	None known.

3. Composition/information on ingredients

Chemical Name	CAS No.	Concentration (% by weight)
Not classified as hazardous.		

4. First aid measures

Description of necessary measures:

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.
Description of acute and delayed symptoms/effects:	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



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Extinguishing media:	
Suitable extinguishing media:	Dry Chemical, CO2, 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 for fire- fighters:	No special procedures are required.
6. Accidental release measures	
Personal precautions, protective equipment, emergency procedures:	Use personal protective equipment as required.
Environmental precautions:	No data available
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.
7. Handling and storage	suitable container for disposal.
7. Handling and storage Precautions for safe handling:	As with all chemicals, good industrial hygiene practices should be followed when handling this material.
Precautions for safe handling: Conditions for safe storage, including a	As with all chemicals, good industrial hygiene practices should be followed when handling this material.
Precautions for safe handling:	As with all chemicals, good industrial hygiene practices should be followed when handling this material.
Precautions for safe handling: Conditions for safe storage, including a	As with all chemicals, good industrial hygiene practices should be followed when handling this material.
Precautions for safe handling: Conditions for safe storage, including a Conditions for safe storage:	As with all chemicals, good industrial hygiene practices should be followed when handling this material. ny incompatibilities: Keep container closed when not in use.
Precautions for safe handling: Conditions for safe storage, including a Conditions for safe storage: Static Sensitivity:	As with all chemicals, good industrial hygiene practices should be followed when handling this material. ny incompatibilities: Keep container closed when not in use. Yes

8. Exposure controls/personal protection



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Control parameters/ Occupational exposure limits or biological limit values:

Chemical Name	Singapore - Occupational Exposure Limits - PELs	Singapore - Occupational Exposure Limits - STELs	Singapore - Biological 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: Respiratory Protection:	NIOSH approved dust mask.
Eye and face protection:	Safety glasses recommended.
Skin protection:	Skin protection may be required depending on product temperature.
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, colour etc.):

Pure Substance or Mixture:	Pure	
Physical State:	Powder	
Colour:	White	
Odour:	Starch	
Odour Threshold:	Not available	
pH:	Not available	
pH in (1%) Solution:	Approximately 6	
Melting point/freezing point:		
Melting Point:	Not available	
Freezing point:	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 limits:		
Upper flammability or explosive limits:	Not available	



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Lower flammability or explosive limits:	Not available
Vapour pressure:	Not available
Vapour density:	Not available
Relative density:	1.5
Solubility:	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:	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:	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 possible routes of exposure:	Ingestion, Inhalation, Skin Contact, Eye Contact
Target Organs Potentially Affected By Exposure:	Not applicable.
Symptoms related to physical, chemical and toxicological	No data available
characteristics:	
Toxic Effects:	This product is considered as being non-toxic. Use of good industrial hygiene practices is recommended.
Exposure levels and health effects:	
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.



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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.
Serious eye damage/irritation:	Based on available data, the GHS classification criteria are not met.
Respiratory sensitisation:	Based on available data, the GHS classification criteria are not met.
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.
Reproductive Toxicity:	Based on available data, the GHS classification criteria are not met.
Carcinogenicity:	No.
Specific Target Organ Toxicity (STOT)-single exposure:	Based on available data, the GHS classification criteria are not met.
Specific Target Organ Toxicity (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):

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
There is no known toxicity data available for the components or the product.			

12. Ecological information

Eco-toxicity:

No information available.

Ecological Toxicity Data:

Chemical Name	CAS No.	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:	None known.



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13. Disposal considerations

Description of waste residues and information on their safe handling and methods of disposal: Disposal should be in accordance with local, state or national legislation.

14. Transport information

DOT Classification: UN number: Proper shipping name or technical name:	Not regulated Not applicable Not applicable
Transport hazard class:	Not applicable
Packing group:	Not applicable
Toxic Inhalation Hazard Zone:	No data available
Environmental hazards for transport purposes:	No data available
Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code):	No data available
Special precautions for user:	Consult IMO regulations before transporting in bulk by ocean.

15. Regulatory information

Safety, health and environmental regulations:

 TSCA Status:
 This product is manufactured in compliance with all provisions of the Toxic Substances Control Act, 15 U.S.C. 2601 et. seq.

 FDA
 GRAS Notification (GRN) 000705

Montreal Protocol on Substances that Deplete the Ozone Layer

Chemical Name	CAS No.	Montreal Protocol on Substances that Deplete the Ozone Layer
No data available		

Stockholm Convention on Persistent Organic Pollutants

Chemical Name	CAS No.	Stockholm Convention on Persistent Organic Pollutants
No data available		



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

Chemical Name	CAS No.	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

С	hemical Name	CAS No.	Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal
N	o data available		

Singapore List of Hazardous Substances

Chemical Name	CAS No.	Singapore List of Hazardous Substances
No data available		

Singapore - HAZCHEM Emergency Action Code(Commonwealth)

Chemical Name	CAS No.	Singapore - HAZCHEM Emergency Action Code(Commonwealth)
No data available		

16. Other information

Revision Date:	02-24-2023
Supercedes:	12-22-2022
Revision Number:	4
Reason for revision:	New
For Information Contact: Hazard Statements:	Singapore: Ingredion Singapore Pte Ltd. Customer Service: +65 6872 6006 No Hazard Statement needed.
Precautionary Statements:	No Precautionary Statement needed.

Disclaimer:



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