

Section 1 - Identification

Product identifier:

Product Number: 32110113
Product Name: N-ZORBIT 2144 DG
plating agent

Other means of identification:

Chemical family: Carbohydrate

Recommended use of the chemical and restrictions on use:

Recommended use: Food ingredient
Restrictions on use: Not Available

Details of manufacturer or importer:

National Starch Pty Ltd
New Zealand Branch
Unit 5, 706 Great South Road
Penrose Auckland 1642
New Zealand
Tel: +64 9 582 0284 (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

Classification of the hazardous chemical:**GHS Hazard Symbols:**

No hazard symbols required

GHS Classification:

Not classified as hazardous in accordance with the Hazardous Substances and New Organisms Act

Signal Word:

No signal word needed.

Hazard Statements:

No Hazard Statement needed.

Precautionary Statements:

No Precautionary Statement needed.

Hazards not otherwise classified:

None known.

Section 3 - Composition/information on ingredients**Substance:**

Not applicable

Mixture:

Chemical Name	Common name and synonyms	CAS No.	Concentration (% by weight)
No hazardous components.			

Section 4 - First-aid measures**Description of necessary first aid 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.

Most important symptoms and effects, acute and delayed, caused by exposure:

Possible physical irritant from dust particles. Potential for dust explosion. Not considered as hazardous.

Medical attention and special treatment:

No further first aid information is available.

Section 5 - Fire-fighting measures

Suitable extinguishing equipment:

Suitable extinguishing media: CO₂, Dry Chemical, Foam, Water Fog

Unsuitable extinguishing media: None known.

Specific hazards arising from the chemical:

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 protective equipment and precautions for fire-fighters:

No special procedures are required.

Section 6 - Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Use personal protective equipment as required.

Environmental precautions:

No data available

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. Prohibit smoking and open flames. Avoid sparks or other sources of static electricity.

Section 7 - Handling and storage

Precautions for safe handling:

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

Conditions for safe storage, including any incompatibilities:

Safe storage conditions:

Store in a clean, dry, well ventilated warehouse away from odorous materials.

Static Sensitivity:

Yes

No special sensitivity.

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.

Mechanical handling of the powder on inadequately grounded equipment can result in static electrical discharges.

Materials to Avoid/Chemical Incompatibility:

None known

Section 8 - Exposure controls/Personal protection

Exposure control measures:

Chemical Name	New Zealand - Occupational Exposure Standards - TWA	New Zealand - Occupational Exposure Standards - STEL	New Zealand - Occupational Exposure Standards - CEIL	New Zealand - Biological Exposure Limit - BEL
No data available				

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

Engineering controls:

General.

Individual protection measures, for example personal protective equipment (PPE):

Respiratory protection:

NIOSH approved dust mask.

Eye and face protection:

Wear safety glasses.

Skin protection:

Skin protection may be required depending on product temperature.

Gloves:

Gloves are recommended due to possible irritation.

Other protective equipment:

Not applicable.

General hygiene conditions:

Wash before eating, drinking, or using toilet facilities.

Section 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 5

Melting point/freezing point:

Melting Point:

Not available

Freezing point:

Not available

Initial boiling point and boiling range:	Not available
Flash Point:	Not applicable
Flammability (solid, gas):	No
Upper/lower flammability or explosive limits:	
Upper flammability or explosive limits:	Not available
Lower flammability or explosive limits:	Not available
Vapour pressure:	Not available
Vapour density:	Not available
Relative density:	No data available
Solubility:	Soluble in water
Partition coefficient: n-octanol/water:	Not available
Auto-ignition temperature:	Not available
Decomposition temperature:	Not available
Kinematic viscosity:	Not available
Particle Characteristics:	Not applicable

Section 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.

Section 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:	None known.
Early onset symptoms related to exposure:	No data available
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.
 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.

Carcinogenicity:

No.

Reproductive Toxicity:

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

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.			

Section 12 - Ecological information

Ecotoxicity: 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: Unknown.

Mobility in soil: Unknown

Other adverse effects: None known.

Section 13 - Disposal considerations

Disposal methods: 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

UN number: Not applicable
UN Proper shipping name: Not applicable
UN dangerous goods class and subsidiary: Not applicable
UN Packing group: Not applicable
Toxic Inhalation Hazard Zone: No data available

Environmental hazards (e.g., Marine pollutant): No data available
Transport in bulk (according to Annex II of MARPOL 73/78 and the IBC Code): No data available
HAZCHEM Code: No data available
Special precautions for user: Consult IMO regulations before transporting in bulk by ocean.

Section 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.

New Zealand - GHS Classifications - HSNO Chemical Classification Information Database (CCID)

Chemical Name	CAS No.	New Zealand - GHS Classifications - HSNO Chemical Classification Information Database (CCID)
No data available		

New Zealand Inventory of Chemicals (NZIOC)

Chemical Name	CAS No.	New Zealand Inventory of Chemicals (NZIOC)

No data available		
-------------------	--	--

New Zealand - Priority List of Hazardous Substances

Chemical Name	CAS No.	New Zealand - Priority List of Hazardous Substances
No data available		

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		

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

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

Section 16: Other information

Revision Date: 02-13-2023

Supersedes:	11-20-2022
Revision Number:	3
Reason for revision:	New
Key abbreviations or acronyms used:	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 TWA= Time Weighted Average vPvB= Very Persistent, Very Bioaccumulative Wt.% = Weight Percent
For Information Contact:	New Zealand: Ingredion ANZ Pty Ltd Customer Service : +64-9-5820284 (Business Hours)

Disclaimer:

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.