

FARMAL(TM) AF 1100

1. Identification

Product identifier:

Product Number: 70000383

Product Name: FARMAL(TM) AF 1100

starch

Other means of identification:

Chemical family: Modified starch

Recommended use of chemical and restrictions on use:

Recommended use: Personal Care
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 India: 000-800-100-7141* Indonesia: 001-803-017-9114* Japan: +(81)-3-4520-9637 Malaysia: +(60)-392125794 New Zealand: +(64)-98010034

Philippines: +(63) 2-395-3308, 1-800-1-322-0553* Singapore: +(65)-31638374, 800-101-2201* South Korea: +(82) 070-7686-0086, 080-880-0454* Taiwan: +886-2-7741-4207*, 00801-49-1821*

Thailand: 1800014808* 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



FARMAL(TM) AF 1100

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.

% unknown toxicity (Oral):
% unknown toxicity (Dermal):
100 % of the mixture consists of ingredients of unknown toxicity
100 % of the mixture consists of ingredients of unknown toxicity

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.

Possible physical irritant from dust particles. Potential for dust explosion.

Skin Contact: Wash skin with soap and water. If symptoms develop, obtain medical

attention.

Ingestion: Treat symptomatically and supportively. Get medical attention.

Description of acute and delayed

symptoms/effects:

Trout of inpromision of and outpoint of the ou

Indication of immediate medical

attention and special treatment needed, if necessary:

No further first aid information is available.



FARMAL(TM) AF 1100

5. Fire fighting measures

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

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:

Conditions for safe storage: All handling equipment must be properly grounded. Mechanical handling

of the powder on inadequately grounded equipment can result in static electrical discharges. Store in a cool, dry area away from heat, sparks or

fire.

Static Sensitivity: Yes

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.

Materials to Avoid/Chemical

Incompatibility:

None known

8. Exposure controls/personal protection



FARMAL(TM) AF 1100

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: Wear safety glasses with side shields. Protect against dust and

particulates.

Skin protection: Employee must wear appropriate protective gloves to prevent contact with

this substance.

Gloves: The use of chemically resistant gloves is recommended.

Other protective equipment: Remove contaminated clothing and launder before reuse. Uniforms,

coveralls, or a lab coat should be worn.

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:
Physical State:
Colour:
Powder
White
Odour:
Starch

Odour Threshold: Not available pH: Not available pH in (1%) Solution: Approximately 6

Melting point/freezing point:

Melting Point:

Freezing point:

Initial boiling point and boiling range:

Not available

Not available

Not applicable

Evaporation Rate:

Not applicable

Flammability (solid, gas): No

Page 4 of 9



FARMAL(TM) AF 1100

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: 1.5

Solubility: Insoluble Partition coefficient: n-octanol/water: Not available **Auto-ignition temperature:** Not available Not available **Decomposition temperature:** 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 None known Incompatible materials:

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:

None known.

Symptoms related to physical,

chemical and toxicological

No data available

characteristics:

Toxic Effects: The toxicological properties of this product have not been fully evaluated.

Use of good industrial hygiene practices is required. Avoid direct contact

with skin or eyes. Do not ingest or inhale.



FARMAL(TM) AF 1100

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.

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

Skin corrosion/irritation: If symptoms develop, obtain medical attention. Repeated or prolonged

skin contact may result in mild irritation. The toxicological properties of this product have not been fully evaluated. Use of good industrial hygiene practices is required. Avoid direct contact with skin or eyes. Do not ingest

or inhale.

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:

Specific Target Organ Toxicity (STOT)

-repeated exposure:

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

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 | | | | |



FARMAL(TM) AF 1100

Persistence and degradability: No data available

Bioaccumulative potential: No data available

Mobility in soil: Unknown

Other adverse effects: None known.

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: Not applicable Proper shipping name or technical Not regulated.

name:

Transport hazard class:

Packing group:

Not applicable

Not applicable

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 material is not on the TSCA Inventory. It is excluded under the Food,

Drug, and Cosmetic Act.

FDA Cosmetic ingredient

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 | | |



FARMAL(TM) AF 1100

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

| CI | hemical Name | CAS No. | Rotterdam Convention on the Prior Informed Consent Procedure for Certain Hazardous Chemicals and Pesticides in International Trade |
|----|------------------|---------|--|
| No | o 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 | | |

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: Singapore:

Ingredion Singapore Pte Ltd.

Page 8 of 9



FARMAL(TM) AF 1100

Customer Service: +65 6872 6006

Hazard Statements: No Hazard Statement needed.

Precautionary Statements: No Precautionary Statement needed.

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.