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Material Safety Data Sheet
Oxidised Tapioca Starch

Section 1 - Product Identification

Synonyms : Farmal CS 3403 Plus; Farmal CS 3404; Farmal-G-CS-2101
Company Identification : Tradeasia International Pte. Limited
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Recommended use of the chemical and restrictions on use:

- Food ingredient (Thickener/Stabiliser)

Section 2 – Composition/Information on Ingredients

The product contains greater than 99.9 percent (%) borax decahydrate $Na_2B_4O_7.5H_2O$

Chemical Name	EC No/CAS No	Purity, %
Starch	9005-25-8	>=97%

Section 3 – Hazards Identification

Not classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport by Road and Rail; NON-DANGEROUS GOODS. Based on available information, not classified as hazardous according to Safe Work Australia; NON-HAZARDOUS SUBSTANCE.

Section 4 – First-Aid Measures

4.1. Description of first aid mesaures

Skin contact

If skin contact occurs, remove contaminated clothing and wash skin with running water. If irritation occurs seek medical advice.

Eye contact

If in eyes, wash out immediately with water. In all cases of eye contamination it is a sensible precaution to seek medical advice.

Inhalation

Remove victim from area of exposure - avoid becoming a casualty. Seek medical advice if effects persist.

Ingestion

Although swallowing is unlikely to cause problems, it is a sensible precaution to rinse the mouth with water and give a glass of water to drink.

Note to physicians

Treat symptomatically.

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

N.A.

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

N.A.

Section 5 – Fire Fighting Measures

5.1. Suitable Extinguishing media

Fine water spray, normal foam, dry agent (carbon dioxide, dry chemical powder).

5.2. Specific hazards arising from the chemical

Combustible solid.

5.3. Special protective actions for fire-fighters
On burning will emit toxic fumes. Fire fighters to wear self-contained breathing apparatus and suitable protective clothing if risk of exposure to vapour or products of combustion.

Section 6 – Accidental Release Measures

6.1. Personal precautions, protective equipment and emergency procedures
If contamination of sewers or waterways has occurred advise local emergency services.
6.2. Environmental precautions
If contamination of sewers or waterways has occurred advise local emergency services.
6.3. Methods and material for containment and cleaning up
Land spill)
Wear protective equipment to prevent skin and eye contact and breathing in dust. Work up wind or increase ventilation. Cover with damp absorbent (inert material, sand or soil). Sweep or vacuum up, but avoid generating dust. Collect and seal in properly labelled containers or drums for disposal.

Section 7 – Handling and Storage

7.1. Precautions for safe Handling
Avoid skin and eye contact and breathing in dust. In common with many organic chemicals, may form flammable dust clouds in air. For precautions necessary refer to Safety Data Sheet "Dust Explosion Hazards".
7.2. Conditions for safe storage, including any incompatibilities
Store in a cool, dry, well ventilated place and out of direct sunlight. Keep containers closed when not in use - check regularly for spills.

Section 8 – Exposure Controls/Personal Protection

8.1. Control parameters
Starch: 8hr TWA = 10 mg/m3As published by Safe Work Australia Workplace Exposure Standards for Airborne Contaminants.TWA - The time-weighted average airborne concentration of a particular substance when calculated over an eight-hour working day, for a five-day working week.These Workplace Exposure Standards are guides to be used in the control of occupational health hazards. All atmospheric contamination should be kept to as low a level as is workable. These workplace exposure standards should not be used as fine dividing lines between safe and dangerous concentrations of chemicals. They are not a measure of relative toxicity.
8.2. Appropriate engineering controls
Ensure ventilation is adequate to maintain air concentrations below Workplace Exposure Standards. Avoid generating and breathing in dusts. Use with local exhaust ventilation or while wearing dust mask. Keep containers closed when not in use.
8.3. Individual protection measures, such as personal protective equipment (PPE)
Wear overalls, safety glasses and impervious gloves. Avoid generating and inhaling dusts. If determined by a risk assessment an inhalation risk exists, wear a dust mask/respirator meeting the requirements of AS/NZS 1715 and AS/NZS 1716. Always wash hands before smoking, eating, drinking or using the toilet. Wash contaminated clothing and other protective equipment before storage or re-use.

Section 9 – Physical and Chemical Properties

9.1. Information on basic physical and chemical properties
Appearance : white powder
Odour : odourless
Odour threshold : N.A.
pH @ 20°C : 4-7.
Melting point : N.A.
Boiling point : N.A.
Flash point : N.A.
Evaporation rate : N.A.
Flammability : N.A.
Upper/lower flammability or explosive limits As dust Min. 15 g/m^3

Vapour pressure : N.A.
Relative density : N.A.
Solubility in water : Insoluble
Partition coefficient N.A.
Auto-ignition temperature : N.A.
Decomposition temperature : >150
Viscosity : N.A.

Section 10 – Stability and Reactivity

10.1. Reactivity
Stable under normal conditions of use.
10.2. Chemical stability
Stable under normal conditions of use.
10.3. Possibility of hazardous reactions
None known.
10.4. Conditions to avoid:
Avoid dust generation.
10.5. Incompatible materials
None known.
10.6. Hazardous decomposition products
Oxides of carbon

Section 11 – Toxicological Information

11.1. Information on toxicological effect
No adverse health effects expected if the product is handled in accordance with this Safety Data Sheet and the product label. Symptoms or effects that may arise if the product is mishandled and overexposure occurs are:

Ingestion: No adverse effects expected.
Eye contact: May be eye irritant. Exposure to the dust may cause discomfort due to particulate nature. May cause physical irritation to the eyes.
Skin contact: Contact with skin may result in irritation. Can cause skin to dry out.
Inhalation: Breathing in dust may result in respiratory irritation.
Acute Toxicity: No data available
Chronic effects: No effects reported

Section 12 – Ecological Information

12.1. Ecotoxicity
Avoid contamination waterways.

Section 13 – Disposal Considerations

13.1. Disposal methods
Refer to Waste Management Authority. Dispose of contents/container in accordance with local/regional/national/international regulations.

Section 14 – Transport Information

Road and Rail Transport
Not classified as Dangerous Goods by the criteria of the Australian Dangerous Goods Code (ADG Code) for transport by Road and Rail; NON-DANGEROUS GOODS.(Bad file name or number)(Bad file name or number)

Marine Transport
Not classified as Dangerous Goods by the criteria of the International Maritime Dangerous Goods Code (IMDG Code) for transport by sea; NON-DANGEROUS GOODS.

Air Transport
Not classified as Dangerous Goods by the criteria of the International Air Transport Association (IATA) Dangerous Goods Regulations for transport by air; NON-DANGEROUS GOODS.

Section 15 – Regulatory Information

15.1. Safety, health and environmental regulations
Based on available information, not classified as hazardous according to Safe Work Australia; NON-HAZARDOUS SUBSTANCE.

Section 16 : Additional Information

16.1. Mainly changes made to the previous version of this Material Safety Data Sheet (MSDS):
• This MSDS complies with ISO 11014; the requirements of UN-GHS

Revision No	Revision content
05	• This SDS is updated in accordance with the GHS (Rev.6) (2015)-Guidance on the Compilation of Safety data Sheets. • This SDS is updated in line with Eti Maden Corporate identity.

16.2. Disclaimer of Liability
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