Material Safety Data Sheet
Tapioca Starch

Section 1: Chemical Product and Company Identification
Product Name: Tapioca Starch
Chemical Formula: \( \text{C}_{27}\text{H}_{48}\text{O}_{20} \)
Company Identification: Tradeasia International Pte Ltd
Email: contact@chemtradeasia.com

Section 2: Composition and Information on Ingredients
Composition:

<table>
<thead>
<tr>
<th>Name</th>
<th>CAS#</th>
<th>% by Weight</th>
</tr>
</thead>
<tbody>
<tr>
<td>Starch</td>
<td>9005-25-8</td>
<td>( \geq 97 )</td>
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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
Inhalation:
Remove victim from area of exposure - avoid becoming a casualty. Seek medical advice if effects persist.

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.

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.

Indication of immediate medical attention and special treatment needed: Treat symptomatically

Section 5: Fire and Explosion Data
Suitable Extinguishing Media: Fine water spray, normal foam, dry agent (carbon dioxide, dry chemical powder).

Specific hazards arising from the substance or mixture: Combustible solid.

Special protective equipment and precautions 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

Emergency procedures/Environmental precautions:
If contamination of sewers or waterways has occurred advise local emergency services.

Personal precautions/Protective equipment/Methods and materials for containment and cleaning up: 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

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".

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

Starch: 8hr TWA = 10 mg/m3
As 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.

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.

Individual protection measures, such as Personal Protective Equipment (PPE):
The selection of PPE is dependent on a detailed risk assessment. The risk assessment should consider the work situation, the physical form of the chemical, the handling methods, and environmental factors.
Orica Personal Protection Guide No. 1, 1998: E - OVERALLS, SAFETY SHOES, SAFETY GLASSES, GLOVES, DUST MASK.
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
Physical state and appearance: Powder.
Odor: Neutral.
Molecular Weight: Not available.
Color: White.
pH: 4-7 (30% suspension)
Decomposition Point: > 150°C
Melting Point: Not available
Critical Temperature: Not available.
Specific Gravity: Not available.
Vapor Pressure: Not available.
Vapor Density: Not available.
Volutility: Not available.
Odor Threshold: Not available.
Water/Oil Dist. Coeff.: Not available.
Ionicity (in Water): Not available.
Dispersion Properties: Not available.
Solubility: Insoluble in water.

Section 10: Stability and Reactivity Data
Stability: Stable under normal conditions of use.
Instability Temperature: Not available.
Conditions of Instability: Not available.
Conditions to Avoid: Avoid dust generation.
Incompatibility with various substances: None known.
Special Remarks on Reactivity: Not available.
Special Remarks on Corrosivity: Not available.
Polymerization: Will not occur.
Hazardous Decomposition Products: Oxides of carbon.

Section 11: Toxicological Information
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 an 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 LD50 data available for the product.
Chronic effects: No chronic effects reported.

Section 12: Ecological Information
Ecotoxicity: Avoid contaminating waterways.
BOD5 and COD: Not available.
Products of Biodegradation: Not available.
Toxicity of the Products of Biodegradation: Not available.
Special Remarks on the Products of Biodegradation: Not available.

Section 13: Disposal Considerations
Waste Disposal:
Waste must be disposed of in accordance with federal, state and local environmental control 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.

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: Other Regulatory Information
Classification: Based on available information, not classified as hazardous according to Safe Work Australia; NON-HAZARDOUS SUBSTANCE.
Poisons Schedule (SUSMP): None allocated.
This material is listed on the Australian Inventory of Chemical Substances (AICS).

Section 16: Other Information
Reason(s) for Issue: First Issue Primary SDS

The information above is believed to be accurate and represents the best information currently available to us. However, we make no warranty of merchantability or any other warranty, express or implied, with respect to such information, and we assume no liability resulting from its use. Users should make their own investigations to determine the suitability of the information for their particular purposes. In no way shall Tradeasia International Pte. Ltd. Be liable for any claims, losses, or damages of any third party for or lost profits or any special, indirect, incidental, consequential or exemplary damages, howsoever arising, even if Tradeasia International Pte. Ltd. has been advised of the possibility of such damages.