

PRODUCT SAFETY DATA SHEET FABA BEAN PROTEIN CONCENTRATE

Statement of Hazardous Nature

Not classified as hazardous according to the criteria of Worksafe Australia

SECTION 1 IDENTIFICATION OF THE SUBSTANCE AND OF THE COMPANY

Product Name Other Names Product Use	Faba bean protein concentrate Fava bean protein concentrate An ingredient for use in the food and beverage industries (domestic and export).
Company Name	INTEGRA FOODS PTY LTD 67 South Terrace Adelaide, SA 5000 AUSTRALIA
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SECTION 2 HAZARDS IDENTIFICATION AND HEALTH EFFECTS

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Warning
May form combustible dust concentrations in air.
Inhalation may aggravate those with pre-existing conditions including skin, eye and respiratory conditions.
Not a hazard if swallowed.
Mild irritant. Direct contact may cause discomfort in some individuals.
Powder may be a mild irritant and lead to dry or itchy skin.
Powdermay be an irritant to airway passage.
Recurrent skin contact with powder may lead to dermatitis. Prolonged inhalation of powder may cause the condition known as "baker's asthma".



SECTION 3 COMPOSITION AND INFORMATION ON INGREDIENTS

Faba beans are a pulse crop, cultivated for use in food industry, beverages and stockfeed.

Intended Use	Ingredient for the food and beverage industries (domestic and export).
Unintended Use	May not be fed to ruminants without blending with other ingredients.
Ingredients	Processed from 100% Faba beans (<i>Vivia faba</i>).
Packaging	20kg, 80gsm Mondi Advantage Kraft Brown, HDPE.

SECTION 4 FIRST AID MEASURES

General Exposure	Not hazardous under anticipated conditions of normal use.
Inhalation	Remove to fresh air. Seek medical advice if irritation persists.
Skin	Wash thoroughly with soap and clean water.
Eye	Irrigate with clean water for a minimum of 5 minutes. Seek medical attention if required.
Ingestion	Not hazardous.
Symptoms caused by exposure	
	Possible physical irritant from dust particles.
	Potential for dust explosion.
First Aid Facilities	No specific requirements.
Advice to Doctor	No specific instructions.

SECTION 5 FIREFIGHTING MEASURES

Suitable extinguishing equipment

Suitable extinguishing media: Dry chemical, CO₂, water fog, foam.

Unsuitable extinguishing media: None known.

Special Hazards

Faba bean flour, powder and dust is combustible and under some circumstances can form explosive clouds in the air.

Supports combustion at high temperatures. Sources of ignition should be avoided.

Can give rise to hazardous fumes (oxides of carbon) on combustion.

Equipment should be earthed to avoid electrostatic discharges.

Special protective equipment and

precautions for firefighters: No special procedures are required.

EXERCISE CAUTION WHEN FIGHTING ANY FIRE. DO NOT ENTER FIRE AREA WITHOUT PROPER PROTECTIVE EQUIPMENT. DO NOT ALLOW RUN-OFF FROM FIRE FIGHTING TO ENTER DRAINS.

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SECTION 6 ACCIDENTAL RELEASE

General Measures	Collect spillage. Avoid generating dust. Handle in accordance with good industrial hygiene and safety practice. Good housekeeping is needed during storage, transfer, handling and use of this material to avoid excessive dust accumulation. Spillage can be slippery on smooth surfaces either wet or dry.
Personal Protection	Persons sensitive to flour, powder or dust should wear full-face dust masks at all times. Dust masks to be worn in poorly ventilated areas or where handling generates excessive dust.
	Safety glasses fitted with a brow guard (a foam or soft plastic insert around the eyepiece) are necessary where handling generates excessive dust.
Emergency Procedures	Evacuate unnecessary personnel. Ventilate any areas
Environmental Precautions	Avoid the material entering public waters, water courses and drains.
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.

SECTION 7 HANDLING AND STORAGE INFORMATION

Handling

Handle in accordance with good industrial hygiene and safety procedures. Wash hands and other exposed areas before eating, drinking or smoking and again when leaving for work.

Storage and Transport

Not classified as dangerous goods. Store in a clean, cool and dry environment. Stores should be suitable for foodstuffs, and protected from contamination with birds, insects and pests. Keep container closed when not in use.

Minimise dust generation under normal use conditions. Avoid dispersing the powder in the air and prevent buildup on surfaces.

Bulk storage in concrete, steel/fabric silos. Bag storage in paper/HDPE. Transport is by bulk or bagged product.

SECTION 8 EXPOSURE CONTROLS/PERSONAL PROTECTION	
Exposure Standards	No data available. (Grain dust TWA: 4 mg/m³)
Engineering Controls	Dust extraction is recommended if handling procedure generates dust. Proper grounding procedures to avoid static electricity should be followed. Ensure all national/local regulations are observed.



Personal protective equipment

Dust masks. Gloves. Protective glasses/goggles.



SECTION 9 PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Off-white to cream coloured fine powder.
Odour	Characteristic
Odour threshold	Not available
рН	Not available
Boiling/Melting Point	Decomposes
Flash point	Not available
Evaporation rate	Not available
Flammability Limits	Not Applicable
Vapour Pressure	Not Applicable
Vapour density	Not applicable
Specific Gravity	0.65 to 0.75 g/cm ³ (approx. bulk density)
Solubility	Soluble in water
Ignition Temperature	360 °C (layer dust)
Viscosity	Not applicable
Specific heat value	Not applicable
Saturated vapour concentration	Not applicable
Release of invisible flammable vapours and gases	Not applicable
Particle size distribution	0.2 – 10 µm
Shape and aspect ratio	Not applicable
Crystallinity	Not applicable



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Dustiness	Not available (Grain dust TWA: 4 mg/m³)
Surface area	Not available
Degree of aggregation, agglomeration, dispersibility	Not available
Redox potential	Not applicable
Biodurability or biopersistence	Not applicable
Surface coating or chemistry	Not applicable

SECTION 10 STABILITY AND REACTIVITY

Reactivity	Not expected to be reactive.
Chemical stability	Stable under normal conditions.
Possibility of hazardous reactions None known	
Conditions to avoid	None known
Incompatible materials	None known.
Hazardous Combustion	Combustion will generate oxides of carbon.

SECTION 11 TOXICOLOGICAL INFORMATION

Non-toxic food product

Allergen Information

Faba beans are non-allergenic .

SECTION 12 ECOLOGICAL INFORMATION

Ecological Toxicity Data	No data available.
Persistence and degradability	Biodegradable. Nutrient Source
Bioaccumulative potential	No data available
Mobility in soil	Unknown
Other adverse effects	None known.
SECTION 13 DISPOSAL	

Can be disposed of to landfill

SECTION 14 TRANSPORT

Not classified as hazardous under relevant Directives



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SECTION 15 REGULATORY INFORMATION

Not classified as hazardous under the following international agreements.

- Montreal Protocol (Ozone depleting substances)
- The Stockholm Convention (Persistent Organic Pollutants)
- The Rotterdam Convention (Prior Informed Consent)
- Basel Convention (Hazardous Waste)
- International Convention for the Prevention of Pollution from Ships (MARPOL).

Not applicable under the following Australian regulatory requirements.

- Standard for the Uniform Scheduling of Medicines and Poisons (SUSMP)
- Agricultural and Veterinary Chemicals Act 1994
- Industrial Chemicals Act 2019

SECTION 16 OTHER INFORMATION

Shelf life 2 years

SECTION 17 OTHER

Although faba bean powder is inherently a non-hazardous material, under inadequate handling and storage conditions, potential hazards may occur.

Precautions should be taken in storage in order to minimise dust brought about by impact or abrasion and by insect or rodent infestation. The powder may become airborne and if at high concentrations and in the presence of an ignition source, at times, may cause fire and explosion.

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