Mauri Products Ltd
Stockholm Road, Sutton Fields
Industrial Estate,
Hull, East Yorkshire, HU7 0XW
TEL: +44 (0)1482 833133
EMAIL: fsq@abmauri.com

Safety Data Sheet

PINNACLE CRISP SOUR

CONFORM TO EC Reg n° 1907/2006 (REACH)/ Regulation (EC) n° 1272/2008

SECTION 1: Identification of the substance/mixture and company information

1.1 Product identifier

Product name: PINNACLE CRISP SOUR

Product Code: 10kg- 9B00818142B1 10kg Plain- 9B0081814PB1

500g- 9B00818142C2 500g Plain- 9B0081814PC2

Product description: ACTIVE DRY YEAST

1.2 Relevant identified uses of the substance or mixture and uses advised against

Recommended use: For the production of beer

Relevant identified uses:

Uses that are not recommended:

1.3 Details of the supplier of the safety data sheet

Mauri Product Ltd
Stockholm Road
Sutton Fields Industrial Estate
Hull HU7 0XW
Email: fsq@abmauri.com

1.4 Emergency telephone number

24 Hour telephone number	+44 (0) 1482 833133

Non-Emergency Assistance Number	+44 (0) 1482 833133

Emergency telephone number	Please contact the local emergency authorities

1.5 Country of Origin

Made in UK

SECTION 2: Hazards identification

2.1 Classification of the substance or Mixture according to regulation (EC) No 1272/2008 (CLP)

- These substances and mixtures are not classified as hazardous in accordance with Regulation (EC) No 1272/2008

2.2 Label elements according to regulation (EC) No 1272/2008:

- **Special labelling:**
  None required
- **Hazard pictograms:**
  None required
- **Signal word:**
  Not required
- **Hazard statements:**
  None required
- **Precautionary statements:**
  None required
- **Special provisions:**
  None
- **Special provisions according to ANNEX XVII of REACH and subsequent amendments:**
  None

2.3 Classification based on 29 CFR Appendix A.4 to §1910.1200 and GHS classification

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These substances and mixtures are not classified as hazardous.

2.4 Other hazards
Dry Yeast may release CO2 when rehydrated due to cells metabolism. If exposed to very high temperatures it may release CO.

Section 3: Composition/information on ingredients

3.1 – Hazardous Substances
None

3.2 Hazardous Mixtures within the meaning of the CLP, EC 1907/2006 (REACH), GHS and related classification

Components/Ingredient/ Substance name	**EC number**	**CAS-No**	**INS No**	**%**	Classification according to Regulation (EC) No 1272/2008 (CLP):
Yeast (*Lachancea thermotolerans*)			N/A	99	None
Sorbitan monostearate (E491)	215-664-9	1338-41-6	491	1	None

Any concentration shown as a range is to protect confidentiality or is due to batch variation.
There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

Section 4: First aid measures

4.1 Description of first aid measures

- **Eye contact:** Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do so. Continue rinsing. If eye irritation persists, get medical advice/attention.
- **Skin Contact:** Wash with plenty of soap and water. If skin irritation occurs, seek medical advice/attention.
- **Ingestion:** Rinse mouth. If swallowed and you feel unwell, seek medical advice/attention. Excessive ingestion of highly concentrated yeast could lead to intestinal discomfort (e.g. diarrhoea, cramps, etc.), should it happen drink plenty of water. Do not give anything by mouth to an unconscious person.
- **Inhalation:** In some cases, repeated exposure may lead to sensitization based upon exposure level, duration and susceptibility of the individual. Subsequent chronic or acute exposure in sensitised persons may cause a respiratory difficulty reaction in minutes or delayed. Typical symptoms are respiratory irritation, breathlessness, coughing, chest tightness and difficulty in breathing. If breathing is difficult, remove to fresh air and keep at rest in a position comfortable for breathing. If respiratory symptoms persist, seek medical advice/attention. In case of CO_2 release in a closed environment/ confined space, which may occur when Dry yeast is in contact with an aqueous solution, immediately remove person to fresh air and contact the local emergency authorities.

4.2 Most important symptoms and effects, both acute and delayed
Acute and delayed effects are indicated in sections 2 and 11.

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

General note: Provide this safety data sheet to anyone giving medical treatment.

SECTION 5: Firefighting measures

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5.1 Extinguishing media - If involved in a fire use equipment/media appropriate to the surrounding conditions.

- **Suitable extinguishing media:** Water, Carbon dioxide, dry chemical powder, or suitable foam.
- **Unsuitable extinguishing media:** Full water jet

5.2 Special hazards arising from the substance or mixture

The product has a low fire and explosion risk under normal conditions of storage, manipulation and use.
Dust dispersed in air in sufficient concentrations, and in the presence of an ignition source is a potential dust explosion.
Do not inhale explosion and combustion gases.
Hazardous combustion products: Under fire conditions, may emit toxic fumes of carbon dioxide and carbon monoxide

5.3 Advice for firefighters

As in any fire, wear self-contained breathing apparatus and full protective gear. Collect contaminated fire extinguishing water separately. This must not be discharged into drains. Move undamaged containers from immediate hazard area if it can be done safely.

Additional information

Do not contaminate ground and surface water. Dispose in a safe manner in accordance with local regulations.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid dust formation. Local exhaust ventilation (LEV) necessary. Take precautionary measures against electrostatic charging. Do not breathe dust. Use appropriate personal protection equipment (see section 8). Avoid contact with skin, eyes and clothes. In case of CO2 release, which may occur when Dry Yeast is in contact with an aqueous solution, and if in a confined space consider ventilation or wearing self-contained breathing apparatus.

6.1.1 For emergency personnel/ responders:	
Protective equipment:	Use appropriate personal protection equipment (see section 8)
Emergency procedures:	Ensure adequate ventilation of the working area. Evacuate personnel to a safe area.
6.1.2 For non- emergency personnel:	No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilled material. Wear appropriate protective clothing to prevent skin exposure

6.2 Environmental precautions

Do not allow to enter into soil/ subsoil, drains, watercourses (surface and ground water). Retain contaminated washing water and dispose it. Dispose of in accordance with local authority regulations.

6.3 Methods and materials for containment and cleaning up

Wear appropriate personal protective equipment (see section 8).

6.3.1 For cleaning up:	Use appropriate tools to move spill into waste disposal container. Vacuum or sweep up material and place into a suitable disposal container. Appropriately absorb any spills with inert material and dispose of properly. Avoid the formation of dust. After picking up the product, rinse the area and materials with water.
6.3.2 Other information:	Treat the recovered material as prescribed in the section on waste disposal (see section 13).

6.4 Reference to other sections

See section 7 for information on safe handling.
See section 8 for information on appropriate personal protective equipment.

See section 13 for Disposal.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Comply with current legislation concerning the prevention of industrial risks. Local exhaust ventilation (LEV) to be used. Avoid dust formation. Do not breath dust. Wear protective mask (P2 filter) in case of excessive dust.

Protective measures

Keep containers hermetically sealed. Control spills and residues, destroying them with safe methods (section 6). Avoid leakages from the container.

Measures to protect against fire and explosions: Keep working areas free from residues, dust, spills and ignition sources

Measures to prevent aerosol and dust generation: Handle in accordance with good industrial hygiene and safety practices.

Measures to protect the environment: Keep away from drains and watercourses. For more information see section 6.2.

Advice on general occupational hygiene/ general hygiene measures: Good industrial hygiene practices should be observed. Avoid contact with eyes, skin and clothing. Wash hands and face with suitable cleaning products before breaks, and after work and take a shower if necessary. Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

Handling: Store in original vacuum packs in a dry and cool place (4 - 10°C). See guidance on product data sheets. After opening, close pack tightly and reseal it in order to prevent contact with air and water until ready for use; for assuring best performance keep refrigerated (4°C) and use within 5 days.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions: Store in original vacuum packs in a dry, cool place (4 - 10°C).

Packaging materials: See Information on product data sheets.

Requirements for storage rooms and vessels: Keep container tightly closed to prevent moisture pick up. Keep out of direct sunlight.

Advice on joint storage: No special measures are necessary

Further information on storage conditions: Keep container tightly closed to prevent moisture pick up. Keep out of direct sunlight. For local indication: Avoid exposure to humidity. Store in original sealed packages, in a cool (4 - 10°C) dry place (off the floor) in an odour-free environment.

7.3 Specific end use(s)

For production of beer. Not for direct consumption in current state. For further information see finished product specification.

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

DNEL Exposure Limit values:	Not applicable
PNEC Exposure Limit Values:	Not applicable
Exposure limit (ACGIH):	None.
Workplace limits (AGW) Germany:	No additional information available

8.2 Exposure controls

- **Hygiene controls:** Handle in accordance with good industrial hygiene and safety practices. Clean work areas and equipment regularly (see section 6.3). Clean work clothing regularly. Prevent contact with skin, eyes and clothing. Remove contaminated, saturated clothing immediately. Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat or drink. Do not breathe dust.
- **Engineering controls:** Use local exhaust ventilation (LEV). Good general ventilation should be sufficient to control worker exposure to airborne contaminants. Ensure areas are free from sources of ignition. Equipment used to handle this product should be designed to minimise the formation and escape of dust. Dry Yeast releases CO2

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when added to water or water solution, especially on substrates rich in sugars or starch; allow adequate ventilation to ensure levels below recommended exposure limits. After rehydration, if the room is not ventilated open the door about 2 minutes before entering and use the oxygen detector.

- **Personal protective equipment:**
  - **Eye and face protection:** Wear appropriate protective eyewear or chemical safety glasses. For more details on safety glasses consult: EN 166:2001; EN 172:1994/A1:2000; 172:1994/A2:2001; EN ISO 4007:2012
  - **Hand protection:** Wear appropriate protective gloves
  - **Skin protection:** Wear suitable protective clothing. For more details on protective gloves consult: EN 374-1:2003; EN 374-3:2003/AC:2006; EN 420:2003+A1:2009
  - **Respiratory protection:** Good general ventilation should be sufficient to control airborne levels. Wear suitable respiratory equipment in case of insufficient ventilation.
  - **Thermal Hazard:** Wear appropriate thermal protective clothing, when necessary.
  - **Additional emergency measures**: Eye wash station DIN 12899; ISO 3864-1:2002 – Safety colours and Safety signs.
  - **Other:** The user should undertake a full risk assessment prior to using this product to determine the appropriate personal protective equipment to suit local conditions. Personal protective equipment should conform to the relevant EN standard. The information provided on personal protective equipment is for guidance purposes only.

- **Environmental exposure controls:** Avoid dispersion to the environment. Do not allow to enter drains or watercourses. Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical State	Noodle extruded product
Colour	Light tan to beige
Odour	Characteristic
Odour threshold	Data not available
Melting point/freezing point	Not applicable
Boiling point/range	Not applicable
Flash point/ Smoke point	Data not available. Not applicable.
Evaporation rate	Not applicable.
Flammability	Not applicable.
Flammability/explosive limits	Not determined
Vapour pressure	Not applicable
Vapour density	Not applicable
Relative density	Not applicable
Solubility in water	Soluble. Miscible in water and in ethanol solutions
Solubility in oil	Not soluble
Partition coefficient	Not applicable
Auto-ignition temperature	Not applicable
Decomposition temperature	Not applicable
Viscosity	Not applicable
Explosive properties	Not explosive
Oxidising properties	Not applicable

9.2 Other information

More detailed information on the physical and chemical properties can be requested from the supplier.

SECTION 10: Stability and reactivity

10.1 Reactivity

No hazardous reaction when handled, stored and transported according to provisions. Stable and non-reactive.

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10.2 Chemical stability
The product is chemically stable under recommended conditions of storage, use and temperature. Avoid humidity.

10.3 Possibility of hazardous reactions
No hazardous reactions known under normal handling and storage conditions.

10.4 Conditions to avoid
Heat, flames or sparks. Dusts can form flammable mixtures with air in the presence of adequate ignition energy. Vigorous shaking of Dry Yeast that generates dust. Exposure to moist air or water.

10.5 Incompatible materials
No specific data.

10.6 Hazardous decomposition products
Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological Information

11.1 Information on toxicological effects

- **Acute toxicity** No known effects
- **Skin corrosion/irritation** Low hazard for normal industrial handling. May be slightly irritating to skin.
- **Serious eye damage/irritation** Contact with the eyes may cause irritation.
- **Respiratory or skin sensitisation** Low hazard for normal industrial handling**.** In some cases, repeated exposure may lead to sensitization based on the exposure level, duration, and susceptibility of the individual.
- **Oral** Ingestion of small amounts during normal industrial handling is a low hazard. Ingestion of large amounts may cause gastrointestinal tract irritation.
- **Germ cell mutagenicity** No known effects.
- **Carcinogenicity** This product does not contain any known carcinogenic materials.
- **STOT-single exposure** None known
- **STOT-repeated exposure** None known
- **Aspiration hazard** No data available.
- **Symptoms and effects (delayed and chronic) with information on exposure routes** – None known

SECTION 12: Ecological Information

12.1 Toxicity
No known ecological effects. It does not present toxicity for the aquatic environment.

12.2 Persistence and degradability
The substance is considered biodegradable

12.3 Bioaccumulative potential
No bioaccumulation potential.

12.4 Mobility in soil
No Data available.

12.5 Results of PBT and vPvB assessment
This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

12.6 Other adverse effects
Do not allow to enter drains or water courses.

SECTION 13: Disposal Considerations

13.1 Waste treatment methods

- **Product disposal:** Dispose of in accordance with European directives and local regulations. Waste should not be disposed of by release to drains or watercourses.
- **Packaging disposal**: Handle contaminated packages in the same way as the substance itself. Empty packaging should be disposed of or recycled at an approved waste handling site and in accordance with local regulations.

13. 2 Waste classification:
Waste generators must determine whether a discarded material is classified as a hazardous waste. Waste generators must also consult local, regional, and national hazardous waste regulations to ensure complete and accurate classification.

Type of waste (Regulation (EU) No 1357/2014): Non-applicable

SECTION 14: Transport Information

This material is not classified as dangerous goods according to ADR/RID, ADNR, IMDG-Code, ICAO/IATA-DGR
According to the international rules of transport, this product is not hazardous materials.

14.1 UN Number	Not classified as dangerous in the meaning of transport regulations
14.2 UN proper shipping name	
ADR/RID	Not regulated
IMDG Code / ICAO-TI / IATA-DGR	Not regulated
14.3 Transport hazard class(es)	Not regulated
14.4 Packaging group	Not regulated
14.5 Environmental hazards	The product is not dangerous for the environment: Amount of toxic ingredients: 0 Amount of very highly toxic ingredients: 0 Marine pollutant: no Environment pollutant: no
14.6 Special precautions for users	Always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage. More detailed information can be requested from the supplier.
14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC code	Not regulated

SECTION 15: Regulatory Information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
Not subject to 2012/18/EU (SEVESO III).
Not listed as a hazardous substance or preparation according to the regulation n°1272/2008 (CLP)/
Product not covered by the rules on the labelling of dangerous substances.
Candidate substances for authorisation under the Regulation (EC) 1907/2006 (REACH): Non-applicable
Substances included in Annex XIV of REACH ("Authorisation List") and sunset date: Non-applicable

Limitations to commercialisation and the use of certain dangerous substances and mixtures (Annex XVII, REACH):

Non-applicable

Regulation (EC) 1005/2009, about substances that deplete the ozone layer: Non-applicable
Active substances for which a decision of non-inclusion onto Annex I (Regulation (EU) No 528/2012): Non-applicable
REGULATION (EU) No 649/2012, in relation to the import and export of hazardous chemical products: Non-applicable

Sorbitan monostearate is a part of the exhaustive list of the food additives of the part B of the appendix II of the regulation (CE) n°1333 / 2008 under the number E491.
Comply with any provision of national law in force.

Specific provisions in terms of protecting people or the environment:
It is recommended to use the information included in this safety data sheet as data used in a risk evaluation of the local circumstances in order to establish the necessary risk prevention measures for the manipulation, use, storage and disposal of this product.

Other legislation: The product could be affected by sectorial legislation

15.2 Chemical safety assessment
No Chemical Safety Assessment has been carried out for this substance or mixture by the supplier.

SECTION 16: Other Information

16.1 General

References and data sources- This SDS has been created in accordance with Regulation (EC) nº 1272/2008 (CLP) and CFR Title 29 Part 1910.1200, 2012.
This SDS should be retained and available for employees and other users of this product.

Classification for mixtures and used evaluation method according to Regulation (EC) No 1272/2008
This substance and mixtures are not classified as hazardous.

Relevant H and EUH statements (number and full text)
None
Relevant Precautionary statements:
None

Classification procedure
Calculation method.

Training advice
For further practical guidance and advice on protecting workers health and managing the control and exposure to dust consult the HSE website below.
http://www.hse.gov.uk/guidance/index.htm

Further information for USA can be found in the following links:
Hazard Communication Standard (HCS) 29 CFR 1910.1200
https://www.osha.gov/laws-regs/regulations/standardnumber/1910/1910.1200

16.2 LEGEND (KEY WORDS, ABBREVIATION AND ACRONYMS)

GHS:	Globally Harmonized System of Classification and Labelling of Chemicals
NE:	Not Established
N/A:	Not Applicable
STOT:	Specific target organ toxicity
(R):	Registered Trademark
ADR:	European agreement concerning the international carriage of dangerous goods by road
IMDG:	International Maritime Dangerous Goods
IATA:	International Air Transport Association
IATA-DGR:	International Air Transport Association – Dangerous Goods Regulations
ICAO:	International Civil Aviation Organisation
ICAO-TI:	International Civil Aviation Organisation Technical Instructions
IBC:	Intermediate Bulk Container
MARPOL 73/78:	International Convention for the Prevention of Pollution From Ships,

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	1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)
UN:	United Nations
BCF:	Bioconcentration factor
LD50:	Lethal Dose 50
CL50:	Lethal Concentration 50
EC50:	Effective concentration 50

16.3 Other

Prepared By:	Technical Manager
Creation Date:	06 SEPT 2023
Revision Date:	19 DEC 2023
Valid from:	06 SEPT 2023

Revision Summary:

Disclaimer:
The information contained herein, while not guaranteed, was prepared by competent technical personnel and is true and accurate to the best of our knowledge, information and belief at the time of its publication. AB Biotek uses many sources and references and cannot guarantee completeness or accuracy; this information should be used only as a guide. AB Biotek disclaims all liability for the handling or use of this product.
NO WARRANTY OR GUARANTEE, expressed or implied, is made regarding the product performance, product stability, or as to any other condition of use, handling, transportation, and storage. No suggestions for handling, storage, transportation or use are intended as or to be construed as recommendations which may infringe on any existing patents or violate any State, and/or local laws.
Final determination of suitability of any material is the sole responsibility of the user and they should carry out their own assessment as to the risks to health which this material may present under its actual conditions of use. All materials may present unknown hazards and should be used with caution.

End of SDS