FEED SAFETY DATA SHEET

CMS (CONDENSED MOLASSES FERMENTATION SOLUBLES), CMS PLUS (CONDENSED MOLASSES FERMENTATION SOLUBLES PLUS)

(Based on GMP + D2.6)

SDS No. SDS 034-3

| FEED SAFETY DATA SHEET | | 0.1. Product 0.2. Status 0.3. Version number 0.4. Version date | | CMS (Condensed molasses fermentation solubles) CMS Plus (Condensed molasses fermentation solubles plus) Revision 3 14/08/2023 | | |
|------------------------|-------------------------------|---|---|---|---|--|
| 1. N | ame of purchasing | company | (GMP+) | | , | |
| 1.1 | Responsibility for | r the feed s | afety sheet | VEDAN (VIETI | NAM) ENTERPRISE Corp., Ltd | |
| | | Address | Address | | National Road 51, Hamlet 1A, Phuoc Thai Village, Long Thanh District, Dong Nai Province, Vietnam | |
| 1.0 | Contact | Telephone | | (+84)251-3825111 | | |
| 1.2 | | Fax | | (+84)251-3825138 | | |
| | | E-mail | | vedanservices@vedaninternational.com | | |
| | | Website | | www.vedan.com | ı.vn | |
| 1.3 | Approved by | QA& Central Laboratory Division Manager | | | | |
| 2. Ide | entification of the p | roduct | | | | |
| 2.1 | Product name | ` | CMS (Condensed molasses fermentation solubles) CMS Plus (Condensed molasses fermentation solubles plus) | | | |
| 2.2 | Trade name | Condensed molasses fermentation solubles Condensed molasses fermentation solubles plus | | | lus | |
| 2.3 | Article code of the company | N/A | | | | |
| 2.4 | Permit number (if applicable) | C810239GMP-02.2017 | | | | |
| 2.5 | Product description | CMS (Condensed molasses fermentation solubles) is a by-product obtained after the production of monosodium glutamate. | | | | |

| | | CMS plus (Condensed molasses fermentation solubles plus) is a by-product | | | | | |
|-------|-------------------|---|--|--|--|--|--|
| | | obtained after the production of monosodium glutamate, molasses | | | | | |
| | | Manufacturer: | | | | | |
| | | VEDAN (VIETNAM) ENTERPRISE Corp., Ltd | | | | | |
| 2.6 | Origin | Address: National Road 51, Hamlet 1A, Phuoc Thai Village, Long Thanh | | | | | |
| | | District, Dong Nai Province, Vietnam | | | | | |
| | | Country origin: Vietnam | | | | | |
| | | VEDAN (VIETNAM) ENTERPRISE Corp., Ltd | | | | | |
| 2.7 | Supplier | Address: National Road 51, Hamlet 1A, Phuoc Thai Village, Long Thanh District, Dong Nai Province, Vietnam | | | | | |
| 3. Pr | oduct description | | | | | | |
| 3.1 | | Molasses, STPP, Material H PO Polyachyool/ | | | | | |
| | | Material H ₃ PO ₄ , Polyglycol/ ENHOL EH-30001 | | | | | |
| | | | | | | | |
| | | Steam Sterilization | | | | | |
| | | ↓ | | | | | |
| | | Cooling Molasses, Syrup/ | | | | | |
| | | Fermentation Glucose, H ₃ PO ₄ , | | | | | |
| | | NH ₃ , Strains | | | | | |
| | | Fermentation solution | | | | | |
| | | | | | | | |
| | | Concentration | | | | | |
| | | GA Crystallization HCl | | | | | |
| | Production | | | | | | |
| | process | Steam Growing MSG crystals | | | | | |
| | • | | | | | | |
| | | Centrifugation | | | | | |
| | | Concentration NaOH, NH ₃ | | | | | |
| | | Concentration 134011, 1413 | | | | | |
| | | CMS semi-product | | | | | |
| | | (GA-CMS) Adjust pH of product | | | | | |
| | | according to customer's requirement requirement | | | | | |
| | | CMS | | | | | |
| | | | | | | | |
| | | NH ₃ Vedafeed pH: 5.0±0.5 | | | | | |
| | | Checking, storage, delivery | | | | | |
| | | Molasses CMS plus | | | | | |
| | | Civio pius | | | | | |

| 3.2 | Raw materials and auxiliary sub stances used (including feed additives and processing aids) | Material: - CMS : Condensed molasses fermentation solubles (GA-CMS) - CMS Plus: Condensed molasses fermentation solubles (GA-CMS), molasses | | | | | | | |
|--------|---|--|------------|--|---------------|----------|--|-------------|--|
| 3.3 | Logistical process (transport, (interim) storage, packaging) | Stored in sealed t by ship. | imbient te | mperat | ture with | adequate | ventilation | , transport | |
| 3.4 | Storage life | | nanufac | turing date | 2 | | | | |
| 3.5 | Indicative analysis | a. CMS Parameter Physical Form Colour pH Water content Total solid Crude Protein (Nx6.25) Crude ash b. CMS Plus Parameter Unit Physical Form Colour - Foreign matter Water content % (w/w Total sugar Crude Protein (Nx6.25) % (w/w (Nx6.25) | | CMS+ Liquid Black Negati v) Max 3 v) Min 2 v) Max 1 | Unit | | Limit Liquid Dark brown 3.5 – 4.5 Max 44 Min 56 Min 26 Max 15 Limit CMS+73 CMS+82 CMS+91 Max 38 Max 40 Max 42 Min 16 Min 12 Min 8 Min 20 Min 22 Min 24 | | |
| 4. Sta | | ents | (W/W) | $\frac{\sqrt{20}}{\sqrt{20}}$ $\frac{\sqrt{20}}{\sqrt$ | | | | | |
| 4.1 | Relevant legislation and other requirements | Product complies with the requirements of <u>GMP+FC Scheme 2020</u> and other relevant current legislations. | | | ther | | | | |
| | Relevant | a. CMS and CMS plus | | | | | | | |
| 4.2 | product standards / requirements | Para A | | | Unit mg/kg | | Limit Max 2 | | |

| (chemical, | Pb | mg/kg | Max 10 |
|-------------------------------|---|-------------------------|---------------------|
| physical, microbiological) | Hg | mg/kg | Max 0.1 |
| , , , , | Cd | mg/kg | Max 1 |
| | Salmonella | /25g | Không phát hiện |
| | Mycotoxin: Aflatoxin B1 | mg/kg | Max 0.02 |
| | Antibacterial inhibition | μg/kg | Không phát hiện |
| | Enterobacteriace | cfu/g | Max 300 |
| | Moulds | cfu/g | Max 10 ⁶ |
| | Mycotoxin: Zearalenon | mg/kg | Max 0.3 |
| | Mycotoxin: DON (Deoxynivalenol) | mg/kg | Max 5 |
| | Mycotoxin: Ochratoxin A | mg/kg | Max 0.15 |
| | Melamine | mg/kg | Max 2.5 |
| | Flourine | mg/kg | Max 150 |
| | Potassium | g/kg | Max 60 |
| | Hydrocyanic acid (HCN) | mg/kg | Max 50 |
| | Radioactive material Radioactivity Sum of Cs-134 and Cs-137 | Bq/kg | Max 40 |
| | <u>Dioxin</u> | ng WHO- PCDD/FTEQ/kg | Max 0.75 |
| | Dioxin like PCBs | ng WHO-PCB- TEQ/kg | Max 0.35 |
| | Non-dioxin-like PCBs | μg/kg | <u>Max 10</u> |
| | Aldrin Dieldrin (Singly or combined expressed as dieldrin) | mg/kg | <u>Max 0.01</u> |
| | Chlordane | mg/kg | Max 0.02 |
| | DDT (sum of DDT-, DDD- (or TDE-) | mg/kg | <u>Max 0.05</u> |
| | <u>Endosulfan</u> | mg/kg | <u>Max 0.1</u> |
| | <u>Endrin</u> | mg/kg | <u>Max 0.1</u> |
| | <u>Heptachlor</u> | mg/kg | Max 0.1 |
| | Hexachlorobenzene (HCB) | mg/kg | Max 0.01 |
| | Hexachlorocyclohexane (HCH)- Alfa-isomer | mg/kg | Max 0.02 |
| | Hexachlorocyclohexane (HCH)- Beta-isomer | mg/kg | <u>Max 0.01</u> |
| | Hexachlorocyclohexane (HCH): - Gamma-isomer (lindane) | mg/kg | Max 0.2 |

| | | <u>Nitrites</u> | mg/kg | <u>Max 15</u> | | | | |
|-------|--|--|-------------|---------------|--|--|--|--|
| | | b. CMS plus | | | | | | |
| | | Parameter Unit Limit | | | | | | |
| | | E. coli | cfu/g | < 10 | | | | |
| 4.3 | Intended use | Used as a raw material for feed ma | nufacturing | | | | | |
| 4.4 | Processing of the product (indicate whether the (former) foodstuff needs further processing or has been pro cessed into feed material) | Used as a raw material for feed manufacturing | | | | | | |
| 4.5 | Processing step and instructions for processing | See section 3 | | | | | | |
| 4.6 | Storage and retention conditions | The product is stored in closed tanks or drums. Keep in dry, cool and covered place. | | | | | | |
| 4.7 | Transport requirements | Transport product by truck, trailer, ship, ect at ambient temperature. Do not transport with inappropriate food/ non-food product. | | | | | | |
| 5 I o | helling | I | | | | | | |

5. Labelling

Requested by the importing country or the importer

6. HACCP

| | | 6.2. Risk ass | sessment | 6.3. Control measure | | |
|--|---------------|----------------------|---------------|----------------------|---|--|
| 6.1. Hazard | Cat (C, M, F) | Likely Occurrence | Severity Risk | | 0.5. Control measure | |
| Physical (Garbage, Impurities, Broken glassware) | F | Medium | High | No | - Equipment, closed tank. - Specification of material - PJ500021. - HACCP plan of CMS, CMS Plus product – PJ500075. | |
| Microorganism (Moulds, Yeast) | М | Medium | High | No | Specification of material - PJ500021. HACCP plan of CMS, CMS Plus product – PJ500075. | |

| Chemical (Pb, As, Cd, Hg, Pesticide residue: organochlorine and organophosphates, Radioactive substance, Ethoxyquin and prohibited substances, mycotoxin, chemical residue (HCl residue, NH ₃ residue), Penicillin residue, Lead in the density meter, Mercury in the thermometer, Laboratory chemical) 7. Monitoring | C | Medium | High | No | - Specification of material - PJ500021 HACCP plan of CMS, CMS Plus product – PJ500075. |
|---|------------------------|---|---|----|--|
| 7.1. Parameter | | 7.2. Sampling moment/ Point | | | 7.3. Frequency |
| a. CMS and CMS plus | | | | | |
| Form | | Finished product | | | Every batch |
| Colour | | Finished product | | | Every batch |
| Water content | | Finished product | | | Every batch |
| Crude Protein (Nx6.2 | Crude Protein (Nx6.25) | | | | |
| Crude ash | | | ned product | | Every batch |
| | | | ned product | | Every batch Every batch |
| As | | Finish | | | |
| | | Finish | ned product | | Every batch |
| As | | Finish Finish Finish | ned product | | Every batch Once/ year |
| As Pb | | Finish Finish Finish Finish | ned product ned product | | Every batch Once/ year Once/ year |
| As Pb Hg | | Finish Finish Finish Finish Finish | ned product ned product ned product ned product | | Every batch Once/ year Once/ year Once/ year |
| As Pb Hg Cd | n B1 | Finish Finish Finish Finish Finish | ned product ned product ned product ned product ned product | | Every batch Once/ year Once/ year Once/ year Once/ year |
| As Pb Hg Cd Salmonella | | Finish Finish Finish Finish Finish Finish Finish | ned product ned product ned product ned product ned product ned product | | Every batch Once/ year Once/ year Once/ year Once/ year Once/ year |
| As Pb Hg Cd Salmonella Mycotoxin: Aflatoxi | | Finish Finish Finish Finish Finish Finish Finish Finish | ned product | | Every batch Once/ year |

| Mycotoxin: Zearalenon | Finished product | Once/ year |
|--|------------------|-------------|
| Mycotoxin: DON (Deoxynivalenol) | Finished product | Once/ year |
| Mycotoxin: Ochratoxin A | Finished product | Once/ year |
| Melamine | Finished product | Once/ year |
| Flourine | Finished product | Once/ year |
| Potassium | Finished product | Once/ year |
| Hydrocyanic acid (HCN) | Finished product | Once/ year |
| Radioactive material (Sum of Cs-134 and Cs-137) | Finished product | Once/ year |
| Dioxin | Finished product | Once/ year |
| Dioxin like PCBs | Finished product | Once/ year |
| Non-dioxin-like PCBs | Finished product | Once/ year |
| Aldrin Dieldrin (Singly or combined expressed as dieldrin) | Finished product | Once/ year |
| <u>Chlordane</u> | Finished product | Once/ year |
| DDT (sum of DDT-, DDD- (or TDE-) | Finished product | Once/ year |
| <u>Endosulfan</u> | Finished product | Once/ year |
| <u>Endrin</u> | Finished product | Once/ year |
| <u>Heptachlor</u> | Finished product | Once/ year |
| Hexachlorobenzene (HCB) | Finished product | Once/ year |
| Hexachlorocyclohexane (HCH)- Alfa-isomer | Finished product | Once/ year |
| <u>Hexachlorocyclohexane</u> (HCH)- Beta-isomer | Finished product | Once/ year |
| Hexachlorocyclohexane (HCH): - Gamma-isomer (lindane) | Finished product | Once/ year |
| <u>Nitrites</u> | Finished product | Once/ year |
| b. CMS | | |
| E. coli | Finished product | Once/ year |
| c. CMS plus | | |
| Total sugar | Finished product | Every batch |
| 8. Communication in case of non- | -conformities | |

8. Communication in case of non-conformities

In case the batch does not correspond with the FSDS or the suspicion exist that the health of animals or the food/feed safety is in danger than this must be actively reported to our company.

9. Remarks

| 10. Signatures | | | | |
|----------------|--|--|--|--|
| | | | | |
| | | | | |
| | | | | |
| DD / MM / YY | | | | |
| | | | | |