

FEED SAFETY DATA SHEET

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

(Based on GMP + S9.10)

SDS No. SDS 034 - 5

FEED SAFETY DATA SHEET		0.1. Product	CMS (Condensed molasses fermentation solubles) CMS Plus (Condensed molasses fermentation solubles plus)
		0.2. Status	Revision
		0.3. Version number	5
		0.4. Version date	30/10/2025
1. Name of purchasing company (GMP+)			
1.1	Responsibility for the feed safety sheet		VEDAN VIETNAM ENTERPRISE CORP., LTD
1.2	Contact	Address	<u>National Road 51, Hamlet 1A, Phuoc Thai Village, Dong Nai Province, Vietnam</u>
		Telephone	(+84)251-3825111
		Fax	(+84)251-3825138
		E-mail	vedanservices@vedaninternational.com
		Website	www.vedan.com.vn
1.3	Approved by	QA& Central Laboratory Division Manager	
2. Identification of the product			
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	
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
2.6	Origin	Manufacturer : VEDAN VIETNAM ENTERPRISE CORP., LTD Address : <u>National Road 51, Hamlet 1A, Phuoc Thai Village, Dong Nai Province, Vietnam</u> Country origin: Vietnam
2.7	Supplier	VEDAN VIETNAM ENTERPRISE CORP., LTD Address : <u>National Road 51, Hamlet 1A, Phuoc Thai Village, Dong Nai Province, Vietnam</u>
3. Product description		

3.1	Production process	<pre> graph TD Material([Material]) --> Sterilization[Sterilization] Molasses1[Molasses, STPP, H3PO4, Polyglycol/ ENHOL EH-30001] --> Material Steam1[Steam] --> Sterilization Sterilization --> Cooling[Cooling] Cooling --> Fermentation[Fermentation] Molasses2[Molasses, Syrup/ Glucose, H3PO4, NH3, Strains] --> Fermentation Fermentation --> FS[Fermentation solution] FS --> Concentration1[Concentration] Concentration1 --> GAC[GA Crystallization] HCl[HCl] --> GAC GAC --> GMSG[Growing MSG crystals] Steam2[Steam] --> GMSG GMSG --> Centrifugation[Centrifugation] Centrifugation --> Concentration2[Concentration] Concentration2 --> CMS_SP[CMS semi-product (GA-CMS)] CMS_SP --> CMS([CMS]) CMS --> Vedafeed[Vedafeed pH: 5.0±0.5] NH3[NH3] --> Vedafeed Vedafeed --> CMS_plus([CMS plus]) Molasses[Molasses] --> CMS_plus CMS --> AdjustpH([Adjust pH of product according to customer's requirement]) NaOH_NH3[NaOH, NH3] --> AdjustpH AdjustpH --> Check[Checking, storage, delivery] CMS_plus --> Check </pre>
3.2	Raw materials and auxiliary substances 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 tank, at ambient temperature with adequate ventilation, transport by ship.
3.4	Storage life	12 months from manufacturing date

3.5	Indicative analysis	a. CMS																																																																			
		<table><tr><th>Parameter</th><th>Unit</th><th colspan="5">Limit</th></tr><tr><td>Physical Form</td><td>-</td><td colspan="5">Liquid</td></tr><tr><td>Colour</td><td>-</td><td colspan="5">Dark brown</td></tr><tr><td>pH</td><td>-</td><td colspan="5">3.5 – 4.5</td></tr><tr><td>Water content</td><td>% (w/w)</td><td colspan="5">Max 44</td></tr><tr><td>Total solid</td><td>% (w/w)</td><td colspan="5">Min 56</td></tr><tr><td>Crude Protein (Nx6.25)</td><td>% (w/w)</td><td colspan="5">Min 26</td></tr><tr><td>Crude ash</td><td>% (w/w)</td><td colspan="5">Max 15</td></tr></table>							Parameter	Unit	Limit					Physical Form	-	Liquid					Colour	-	Dark brown					pH	-	3.5 – 4.5					Water content	% (w/w)	Max 44					Total solid	% (w/w)	Min 56					Crude Protein (Nx6.25)	% (w/w)	Min 26					Crude ash	% (w/w)	Max 15									
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4. Standards / Requirements

4.1	Relevant legislation and other requirements	Product complies with the requirements of GMP+FC Scheme 2020 and other relevant current legislations.		
4.2	Relevant product standards / requirements (chemical, physical, microbiological)	a. CMS and CMS plus		
		Parameter	Unit	Limit
		As	mg/kg	Max 2
		Pb	mg/kg	Max 10
		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
		Dioxin	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	Max 10
		Aldrin Dieldrin (Singly or combined expressed as dieldrin)	mg/kg	Max 0.01
		Chlordane	mg/kg	Max 0.02
		DDT (sum of DDT-, DDD- (or TDE-))	mg/kg	Max 0.05
		Endosulfan	mg/kg	Max 0.1
		Endrin	mg/kg	Max 0.1
		Heptachlor	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	Max 0.01
		Hexachlorocyclohexane (HCH): - Gamma-isomer (lindane)	mg/kg	Max 0.2
		Nitrites	mg/kg	Max 15
		b. CMS plus		
		<i>Parameter</i>	<i>Unit</i>	<i>Limit</i>
		E. coli	cfu/g	< 10
4.3	Intended use	Used as a raw material for feed manufacturing		
4.4	Processing of the product (indicate whether the (former) foodstuff needs further processing or	Used as a raw material for feed manufacturing		

	has been processed into feed material)	
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. Labelling

Requested by the importing country or the importer

6. HACCP

6.1. Hazard	6.2. Risk assessment				6.3. Control measure
	Cat (C, M, F)	Likely Occurrence	Severity	Risk	
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)	M	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	C	Medium	High	No	- Specification of material - PJ500021. - HACCP plan of CMS, CMS Plus product – PJ500075.

density meter, Mercury in the thermometer, Laboratory chemical)					
7. Monitoring					
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 (Nx6.25)		Finished product		Every batch	
Crude ash		Finished product		Every batch	
As		Finished product		Once/ year	
Pb		Finished product		Once/ year	
Hg		Finished product		Once/ year	
Cd		Finished product		Once/ year	
Salmonella		Finished product		Once/ year	
Mycotoxin: Aflatoxin B1		Finished product		Once/ year	
Antibacterial inhibition		Finished product		Once/ year	
Enterobacteriace		Finished product		Once/ year	
Moulds		Finished product		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		Finished product		Once/ year	

expressed as dieldrin)		
Chlordane	Finished product	Once/ year
DDT (sum of DDT-, DDD- (or TDE-))	Finished product	Once/ year
Endosulfan	Finished product	Once/ year
Endrin	Finished product	Once/ year
Heptachlor	Finished product	Once/ year
Hexachlorobenzene (HCB)	Finished product	Once/ year
Hexachlorocyclohexane (HCH)- Alfa-isomer	Finished product	Once/ year
Hexachlorocyclohexane (HCH)- Beta-isomer	Finished product	Once/ year
Hexachlorocyclohexane (HCH): - Gamma-isomer (lindane)	Finished product	Once/ year
Nitrites	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		
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 GMP + certified company (Purchaser)		