

1. Identification of the Substance and the Company

1.1 Product name

CMS Liquid
Registration Number 01-2119555297-30-0001

1.2 Identified use(s)

Feed and Fertiliser Purposes
Use(s) advised against None Known

1.3 Manufacturer/Supplier

Company name:
Origin Amenity Solutions Ltd
1-3 Freeman Court,
Jarman Way,
Orchard Road,
Royston,
Hertfordshire,
SG8 5HW
Tel: 0800 138 7222
Email: sales.symbio@originamenity.com

1.4 Emergency Telephone No. :

Emergency phone No. 0800 138 7222 (09.00 – 17.00 GMT Monday – Friday)
National emergency telephone number 111

2. Hazards Identification

2.1. Classification of the substance or mixture

This product is not subject to classification in accordance to CLP EC 1272/2008, DSD Directive 67/548/EEC or DPD Directive 1999/45/EC.

2.2 Label elements

No pictogram required

2.3 Other Hazards

This product does not contain any PBT or vPvB substances.

3. Composition/Information on Ingredients

The condensed by-product of the manufacture of amino acids by fermentation

Name	Inclusion	Product Identifier	Classification DSD / CLP
Vinasses, CMS		EC No.: 932-179-4 01-2119555297-30-0001	Not Classified

4. First Aid Measures

4.1 Description of First Aid Measures

Inhalation	In the event of inhalation remove the person exposed to fresh air
Skin	May cause slight irritation, wash area with soap and water
Eyes	May cause irritation, flood eye with water
Ingestion	No specific first aid measures are required

4.2 Most Important Symptoms and Effects, both Acute and Delayed :

Not Known

4.3 Indication of any Immediate Medical Attention and Special Treatment Needed :

Treat Symptomatically

5. Fire-Fighting Measures

5.1 Extinguishing Media

The product itself does not burn, use a suitable extinguisher for surrounding area.

5.2 Special Hazards arising from the Substance

With heat, product produces carbon, carbon monoxide, carbon dioxide, nitrogen oxides and smoke.

5.3 Advice for Fire Fighters

Fire-fighters should wear full protective clothing and self-contained breathing apparatus operated in positive mode.

6. Accidental Release Measures

6.1 Personal Precautions, Protective Equipment and Emergency Procedures

Follow the procedures for safe handling as listed in this safety data sheet

6.2 Environmental precautions

Biodegradable, increases BOD and COD – see 12.

Contain spills with sand and shovel into salvage container for disposal. Hose down small spillages or residue (slippery when wet) into sewers serviced by wastewater plant with plenty of water. Prevent direct discharge into watercourses or lakes due to high BOD. If this does occur, inform Local Authorities at once.

6.3 Methods and Material for Containment & Cleaning up

Contain and control the leaks or spills with non-combustible absorbent material materials such as earth, vermiculite, diatomaceous earth in drums for waste disposal.

6.4 Reference to other Sections

See sections 8 and 13.

7. Handling and Storage

7.1 Precautions for Safe Handling

Avoid contact with skin, eyes & clothing. Wear recommended PPE. Do not expose to high temperatures (< 40 °C) for an extended period of time to avoid the risk of Maillard reactions.

7.2 Conditions for Safe Storage, including any incompatibilities

Store in ventilated tanks (mild steel, stainless steel, polyethylene, PVC) at ambient temperatures. Avoid microbiological contamination or dilution with water. Storage temperature, ideally ambient but ensure < 40°C if heating is required for handling

7.3 Specific End Uses

Typical end uses include; animal feed component and industrial use.

8. Exposure controls/ Personal protection

8.1 Control Parameters

This product does not contain any relevant quantities of materials with critical values that have to be controlled.

8.2 Exposure Controls

Personal protection	None under normal conditions
Eye protection	Safety glasses or goggles may be desirable when emptying containers or drums. Avoid contact with eyes.
Hand protection	Not required, butyl rubber gloves advised. Avoid prolonged contact with skin. Wash hands before breaks and at the end of work.
Body Protection	Not required but suitable protective clothing is recommended.
Respiratory protection	Not required except in the case of aerosol formation. Do not breathe spray.
Thermal Hazards	Avoid heating over 40 °C

9. Physical and Chemical properties

9.1 Information on basic physical and chemical properties

Appearance at 25°C	Low viscosity brown liquid
Odour	Very weak smell
Odour threshold	Not determined
pH value as is	About 4.5
Freezing point	< 0 (will become more viscous)
Initial boiling point (°C)	> 100
Flash point (°C)	> 100
Evaporation rate	Not known. Similar to water
Flammability	Will not support combustion
Explosion limits (lower) (kg/ m ³)	Not applicable
Vapour pressure	As for water
Relative Density at 20 °C (kg/l)	1.25-1.32
Solubility in water (% weight)	Forms infinite aqueous solution. Soluble in polar solvents
Auto ignition temperature	Not known
Thermal decomposition (°C)	Not Known
Viscosity (cps) at 20°C	About 100 - 500
Oxidising properties	Not considered to have oxidising properties
Explosive properties	Not considered to have explosive properties

9.2 Other information

No other relevant information

10. Stability and Reactivity

10.1 Reactivity

This product is not reactive under normal use

10.2 Chemical Stability

The Product is stable under the recommended handling and storage conditions in Section 7.

10.3 Possibility of Hazardous

No Hazardous Reactions known under normal use reactions

10.4 Conditions to avoid

Stable unless diluted with water when yeast, mould and some harmless bacterial (e.g. Lactobacillus spp.) growth may occur in warm temperatures. Pathogens will not grow in undiluted product due to high osmotic pressure and low water activity. Store at <40 °C

10.5 Incompatible Materials

Strong acids and alkalis, oxidising agents, ammonia, ammonium salts.

10.6 Hazardous decomposition products

Thermal decomposition can produce carbon, carbon monoxide, carbon dioxide, nitrogen oxides and smoke.

11. Toxicological information

11.1 Information on Toxicological Effects

Under normal use Health injuries are not known or expected

- | | |
|--------------------------------------|---|
| a. acute toxicity | No acute toxic effects within limits for classification |
| b. skin corrosion/irritation | May cause slight irritation to skin, but not classified as irritant |
| c. serious eye damage/irritation | May cause slight irritation to eyes, but not classified as irritant |
| d. respiratory or skin sensitisation | None of the components considered to be potential sensitisers |
| e. germ cell mutagenicity | None of the components considered to be mutagenic |
| f. carcinogenicity | None of the components considered to be carcinogenic |
| g. reproductive toxicity | None of the components considered to be toxic for reproduction |
| h. STOT-single exposure | No specific organ toxicity |
| i. STOT-repeated exposure : | No specific organ toxicity |
| j. aspiration hazard | Not an aspiration hazard |

12. Ecological information

12.1 Toxicity

No significant environmental hazard or adverse effect from human or animal exposure resulting from accidental release of this material is anticipated. Its components are used in food and feed and there is no LD₅₀

COD (mgO₂/g ds) : About 350
 BOD (mgO₂/g ds) : About 300
 Ecotoxicity : Due to its high BOD, accidental discharge of large quantities into rivers or lakes will cause temporary algal growth ('bloom') and dissolved oxygen reduction with possible deleterious effects on fish.

12.2 Persistence and Degradability

All organic components known to degrade quickly

12.3 Bioaccumulative potential

None of the components expected to bioaccumulate

12.4 Mobility in soil

The components have a high mobility in soil

12.5 Results of PBT and vPvB

This product does not contain any PBT or vPvB substances assessment

12.6 Other adverse effects

None known

13. Disposal considerations

13.1 Waste Treatment Methods :

Will not be a specific hazard to waste water treatment plants, but does have very high biological oxygen demand. Confirm disposal methods in accordance with local regulations.

14. Transport information

14.1 UN Number

Not Applicable

14.2 UN Proper Shipping

Not Applicable Name

14.3 Transport and Hazard Class(es)

Not Applicable

14.4 Packing Group

Not Applicable

14.5 Environmental Hazards

Not Applicable

14.6 Special Precautions for User

Not Applicable

14.7 Transport in bulk according:

Not Applicable to Annex II of MARPOL73/78 and the IBC Code

15. Regulatory information

15.1 Safety, health and Environmental Regulations/Legislation Specific for the Substance:

Complies with Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) and amendments. The components listed in this datasheet are either exempt or registered under REACH.

15.2 Chemical Safety

Not Applicable Assessment

16. Other information

Symbol(s)	None
R and or S phrases	None
H and P Statements	None

Disclaimer

The information in this SDS was obtained from sources which we believe to be reliable. Origin Amenity Solutions provides the information contained herein in good faith but makes no representation as to its comprehensiveness or accuracy. This document is intended only as a guide to the appropriate handling of the product by properly trained and qualified personnel. Individuals receiving the information must exercise their independent judgment in determining its appropriateness for a particular purpose.

Origin Amenity Solutions makes no warranties or guarantees either express or implied with respect to the information contained herein. The conditions or methods of handling, storage, use or disposal of the product are beyond our control, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product