

### Processed under REACH, European chemicals legislation

CMA-ACR / CMS-LignoKaña / CMS-LignoAmi / CMS-LignoActiv / CMS-LignoBet

**Azucarera del Guadalfeo S.A**. produce a concentrated vinasses (B1 type) under ECHA (European Chemicals Agency) homologation with a REACH number and compounds tolerances.

All our qualities control accreditations are updated, and available in PDF formats that can be downloaded, online at www.vinaza.es

The ECHA specifications are compiled in section 3 page 3 of the FDS.



Azucarera del Guadalfeo, S.A. "División CMS" http://www.vinaza.es



#### **General remarks**

Vinasses result from a fermentation process in which a micro-organism (*Saccharomyces cerevisiae*) having a QPS status (*list of qualified presumption of safety for biological agents from The European Food Safety Authority EFSA*) is fermented with a culture medium consisting of feed or food quality substrates. The fermentation product (ethanol) is extracted from the fermentation broth by distillation. The liquid phase is usually concentrated by evaporation or drying.

While experimental results of physic-chemical parameters determined for vinasses need to be considered as particular cases and are not representative for all types of vinasses (*PC parameter depend on the dry matter content and a particular composition, which may vary to be an UVCB substances - unknown or variable composition, complex reaction products or biological materials*).

#### Physic-chemical data

Depending on the dry matter content, the aggregation state of primary fermentation by-products can be either solid or liquid in ambient conditions. Intermediate paste-type states are also possible. The colour can vary from yellowish to dark brown or black. The colour intensity and related physic-chemical parameters (density and viscosity) depend on the contents of dry matter and water.

The dry mass constituents, many in number, will not have a common melting range, but rather decompose. Accordingly, it is not possible to determine a common boiling range. The initial boiling temperatures will exceed that of water (100°C), with exact values depending on the dry matter content. As vinasses are complex UVCB substances, the determination of the partition coefficient is technically not possible.

The solid dry matter was experimentally determined to be non-flammable. Enrichment with water can only strengthen this feature. As vinasses are non-flammable in air, the auto-flammability does not need to be determined. The pH of nearly all vinasses is acidic. In the liquid state, vinasses are viscous.

#### **Environmental fate and pathways**

The biodegradation of vinasses was tested according to the OECD guideline 301B. A biodegradation of 70 - 75% was observed after 29 days. Therefore, vinasses are considered to be readily biodegradable.

#### Ecotoxicity

All vinasses of the category will contain the same types of constituents. The test results obtained with fish (short term), daphnia (long term), algae and activated sludge reveal no toxicity hazard for the aquatic environment. Because of ready biodegradability, no hazard is expected also in other compartments like air, sediment and soil.

#### Toxicity

The toxicological test results for local and systemic toxicity, reveal no hazard for humans. For skin sensitisation, a weight of evidence approach is applied, taking into account all available animal and human data. All data is consistent with the fact that for several decades' vinasses have been marketed as feed and they are included in the European feed catalogue.

Extract of the ECHA process description form & chemical safety report Update Feb 2011

#### Summarized

The Condensed Molasses Soluble refer to the by-product based on the use of sugar molasses as raw material for producing fermented products using the microbial fermentation pathway. In addition to retaining all the molasses nutrients, other than sucrose, compared to the molasses CMS also contains more amino acids, vitamins, proteins and other special nutrients which are produced during the fermentation. It's a vegetal and feed nutritional compound.

Edited document in August 2023 by: Mr. Daniel Pascal LORENTE, Head of CMS Division

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# Rangos de tolerancias admisibles para la sustancia

## según criterios de la ECHA European Chemicals Agency

Identificador del producto	Nombre del componente	Clasificación según directiva 67/548/CEE
	Cenizas: 0,5 – 45 % (p/p sms)	
	COT (Carbón orgánico total): 5 – 55 % (p/p sms)	)
REACH n⁰:	N total (nitrógeno): 0.5 – 8 % (p/p sms)	
01-2119560584-34-0011	K (potasio): 0.04 – 19 % (p/p sms)	No clasificado
TARIC nº: 2303.30.00.00	S (azufre): 0.15 – 15 % (p/p sms)	
EC nº: 932-161-6	Na (sodio): 0.03 – 9 % (p/p sms)	
	Ca (calcio): 0.5 – 9 % (p/p sms)	
	P (fósforo): 0 – 2 % (p/p sms)	
	Densidad: 0.7 – 2.18 g/cm <sup>3</sup>	
	pH: 3.5 – 6.5	

\*Extracto de la sección 3º de la Ficha de Datos de Seguridad\*