

# RHOVANIL<sup>®</sup> NATURAL CW

## The Global\* natural flavour



- **RHOVANIL<sup>®</sup> Natural CW is a natural flavour compliant with both EU and US regulations on natural flavourings**
- It is a natural ingredient obtained by a natural process (fermentation) with non genetically modified microorganism.
- The raw material is Ferulic acid which is sourced from non GMO rice.
- **RHOVANIL<sup>®</sup> Natural CW** is a white to off-white crystalline powder with an intense and sweet vanillin note, ideal replacement 1:1 of synthetic vanillin.

(\*) Global natural means according to EU and US FDA criteria of naturalness for flavors

## FOOD SAFETY AND HYGIENE

Manufacturing activities of **Rhovani<sup>®</sup> Natural CW** are performed in compliance with the Food safety and Hygiene standards of European Regulations (EC) No 178/2002 and (EC) No 852/2004 and with best practices in terms of food safety and hygiene (efficient HACCP method in place, as defined in EU Regulation 852/2004 and Codex Alimentarius).

The Quality and Food Safety management system in place in our manufacturing facilities is **certified according to FSSC 22000 (Food Safety System Certification)**.

**RHOVANIL<sup>®</sup> Natural CW** is Halal and Kosher Pareve certified.

**Traceability:** Full traceability is guaranteed.



## IDENTIFICATION

N° cas	121-33-5
Synonym	4-Hydroxy-3- Methoxybenzaldehyde
Empirical formula	C8H8O3
Molecular weight	MW = 152.15 g/mol

## SPECIFICATIONS

characteristics	limits	methods
Appearance	White to off-white crystalline powder	Visual
Color (in solution at 10 % in freshly prepared EtOH)	Conform	Compared to reference
Assay	99.5 % min	HPLC
Melting point	81.0 – 83.0°C	Capillary
Loss on drying (moisture)	0.15% max	Gravimetry
Organoleptic property	Conform	Compared to reference
Arsenic	3 ppm max	AA
Cadmium	1 ppm max	AA
Mercury	1 ppm max	AA
Lead	10 ppm max	AA

*The analytical methods used are described in our current quality control standards. Based on our rigorous process control and capabilities, some of these analyses can be performed on a statistical frequency. For the analyses performed on a statistical basis, the frequency is specified on the Certificate of Analysis. Methods are available on request.*

**Microbiology:** Rhovani<sup>®</sup> Natural CW is checked in microbiology on a statistical basis according to European Regulation EC 2073/2005 on microbiological criteria



## APPLICATIONS

**Rhovaniil® Natural CW** has many benefits when used in the following applications:

- **Food applications:** for direct use in chocolate, confectionery, bakery, cereals and dairy categories.

It is a 1:1 replacer of synthetic vanillin that offers the "Natural flavor" labeling for the end consumers.

It can also be used to mask off notes, increase mouthfeel, boost specific notes or bring an intense vanilla taste.

Rhovaniil® Natural CW is also a key ingredient in EU natural flavours to bring the typical taste of vanilla or to bring a sweet note to fruit flavours.

*This product is not intended for direct consumption, in accordance with the definition of Flavoring substance, as defined in the European Flavor Regulation EC 1334/2008.*

- **Cosmetics & fragrance applications:** as a fragrance ingredient, for instance in perfume, lipsticks, balms. It is COSMOS certified.

## SHELF LIFE

**Rhovaniil® Natural CW Vanillin is guaranteed 3 years** from its manufacturing date, according to the following conditions:

- Packaging should be tightly closed and kept away from light, heat and damp in premises suitable for food products.

- It is recommended to avoid contamination by any aromatic product using iron or steel packaging as well as contamination by other aromatic products.

Due to possible temperature variations during transport, minor condensation of water droplets could be observed on the inner liner, which is an intrinsic property of the product and does not induce any Food Safety risk.

## TRANSPORT

Not regulated. For more details please consult our Safety Data Sheet.

## PACKAGING

Packaging materials are in compliance with current EU Food contact legislations.

Polyethylene liners in contact with the product are suitable for food contact

- cardboard box 15 kg net weight
- box of 2.5 litres, 1 kg net weight

## PHYSICAL CHEMICAL PROPERTIES

pH (1% in water)	4.3
Boiling point under 1.3kPa (9.75mmHg)	154°C
Sublimation temperature	70°C
Flash point ( closed cup)	160°C
Self-ignition temperature	400°C minimum
Vapour density (air = 1) (at 25°C)	5.3
Isotopic ratio 13C/12C	-38‰ / -35‰
<b>Solubility</b>	
In water	Slightly soluble (10g/l at 25°C)
In ethanol	Freely soluble
In ethyl acetate, methanol, diethyl ether	Soluble

## LABELLING, REGULATORY COMPLIANCE

**Ingredient:** Vanillin

**Europe: Labeling EU:** "Natural flavour"

**Rhovaniil® Natural CW** complies with the Food safety and Hygiene standards of European Regulations (EC) No 178/2002 and (EC) No 852/2004.

It also complies with the European Flavour Regulation (EC) No 1334/2008 and the European Directive (EC) No 2009/32 as modified relating to extraction solvents used in the manufacture of food stuff and food ingredients. **Rhovaniil® Natural CW** is classified as a "natural flavouring substance" in accordance with European Flavour Regulation (EC) No 1334/2008 and subsequent amendments. **Rhovaniil® Natural CW** complies with Regulation (EC) No 396/2005 on maximum residue levels of pesticides.

**US: Labeling US:** "Natural flavor" or "Natural vanillin flavor"

**Rhovaniil® Natural CW** complies with US FDA 21 CFR 117 - Part 101.22 (a)(3): GRAS FEMA n°3107

**Rhovaniil® Natural CW (vanillin)** is obtained by a bioconversion process of ferulic acid which is sourced from rice bran and therefore meets the requirements of "natural" labelling defined by European Flavour Regulation (EC) No 1334/2008 and subsequent amendments and United States FDA regulation 21 CFR 101.22(a)(3).

**GMO:** Does not contain any GMO or any material derived from genetically modified origin, is not manufactured from GMO, and therefore is not subject to labeling requirements according to European Regulations (EC) N°1829/2003 & N° 1830/2003.

**Allergens:** Please refer to the separate allergen lists according to Regulation (EC) N° 1169/2011.

**Rhovaniil® Natural CW** is listed in the following chemical inventories: EINECS (EU), TSCA (USA), ENCS & ISHL (Japan), AIC (Australia), DSL (Canada), PICCS (Philippines), IECSC (China), (KECI) (Korea), NZIoC (New Zealand), INSQ (Mexico), TCSI (Taiwan).

**Rhovaniil® Natural CW** Vanillin has been EU REACH and KKDIK registered. The registration number are: 01-2119516040-60-0008 (REACH EU) and 01-0000476284-08-000 (KKDIK). Please contact your usual commercial contact for additional REACH EU and KKDIK compliance information and in case of purchase from a legal entity outside the European Economic Area and/or Turkey.

