



Product Data Sheet Rhovani[®] Free Flow - APF PDS RVFF – September 2024

Vanillin for Food & Flavors

The only vanillin you can trust: "The Essence of Safety"

Rhovani[®] Free Flow has a typical vanilla note.

Rhovani[®] Free Flow is the most appropriate grade for food processes requiring good flowability.

Rhovani[®] Free Flow offers the highest purity level on the market.



Food safety and hygiene certification:

Rhovani[®] Free Flow is produced from on-site upstream integrated process guaranteed with low environmental impact.

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

This ensures that manufacturing is performed in respect 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). Our production sites are also ISO 9001 certified.

Rhovani[®] Free Flow is certified Kosher Pareve for Passover and Halal. Certificates are available upon request.

Identification:

N° CAS: 121-33-5

SYNONYM: 4-Hydroxy-3-Methoxybenzaldehyde

EMPIRICAL FORMULA:

MOLECULAR WEIGHT:

$C_8H_8O_3$

MW = 152.15 g/mol

Specifications: (Measures made prior addition of calcium stearate)

CHARACTERISTICS	LIMITS	METHODS
Appearance and color of solid	White to off-white crystalline powder	Visual
Identity	Conforms to standard	Guaranteed Conformity
Odor / Flavor	Typical vanilla note	Compared to reference
Assay (on dried basis)	99.95 % min	HPLC
Color (solution in ethanol)	35 Hazen max	Colorimetry
Melting point	81.0 – 83.0 °C	Capillary
Sulfated ashes	0.05% max	Calcination / Mineralisation
Loss on drying (moisture) *	0.06 % max	Gravimetry
Heavy metals (as lead)	10 ppm max	Limit Test or ICP
Arsenic (as As) *	0.3 ppm max	AAS
Calcium stearate *	0.5 % max	Gravimetry
Benzene	Proven absence	-
Toluene	Proven absence	-



Applications:

Due to an outstanding flowability by addition of maximum 0.5% calcium stearate, Rhovani[®] Free Flow is the most appropriate grade for food blends or food process when automatic dispensing systems are used or when transportation via pneumatic conveyors is required.

- Chocolate, Confectionery, Cocoa powders....,
- Baking, Breakfast Cereals, Dessert mixes....,
- Food flavors formulations.

The product is not intended for direct consumption, in accordance with the definition of Flavouring substance, as defined in the European Flavour Regulation EC 1334/2008.

Physico-chemical properties:

Bulk density Around 0,5 (indicative value)
Specific weight (20°C) 1056 kg/m³
Boiling point (20 hPa or 15 mmHg) 154°C
Flash Point (closed cup at 1022hPa) 160°C

Solubility

In ethanol (90% at 20°C) Easily soluble: 620 g/l
In ethanol (70% at 20°C) Easily soluble: 430 g/l

Transport:

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

Shelf Life:

Rhovani[®] Free Flow is guaranteed 5 years from its manufacturing date, according to the following conditions:

- Containers should be tightly closed, kept in the packaging of origin, away from light, heat and dampness in premises suitable for food products.
- It is recommended to avoid contamination by any aromatic product as well as usage of containers made of iron, or steel or aluminum (and its alloys).

Due to possible temperature variations during supply-chain, 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.

We guarantee minimum of 80% of remaining shelf life upon delivery at the customer premises.

Packaging:

- 25 kg boxes with inside polyethylene liner, on a 300 kg / pallet (2 levels, 6 boxes / level)

Regulatory compliance, Labeling:

Flavour compliance:

Labeling EU: "Vanilla flavour" or "flavour". **Labeling US:** "Artificial vanilla flavor".

Ingredients EU/US: vanillin, calcium stearate.

Europe: Rhovani[®] Free Flow complies with the Food safety and Hygiene standards of the European Regulations n° 178/2002 and n°852/2004. The Vanillin substance complies with the European Flavour Regulation EC n° 1334/2008 as modified, and vanillin is defined as a "flavouring substance" in Europe. **Rhovani[®] Free Flow** is obtained by supplementing Rhovani[®] Vanillin with Calcium Stearate (0.5% max), considered as a carrier, permitted in flavourings according to the Regulation (EU) N° 1130/2011 amending Annex III to Regulation (EC) No 1333/2008 on food additives, by establishing a Union list of food additives approved for use in food additives, food enzymes, food flavourings and nutrients. Calcium Stearate (E470a) is listed in the part IV of Annex III (Food additives including carriers in food flavourings) Table 1. Calcium Stearate is regarded as an additive for flavourings and not as an additive to foodstuffs.

Rhovani[®] Free Flow also complies with the EU Directive EC 2009/32 & its subsequent amendments relating to extraction solvents used in the manufacture of foodstuffs. We ensure no use of toluene and benzene at any stage of the process. Only solvent in Annex I part 1 is used: extraction solvent to be used in compliance with GMP for all uses, without any restricted limit.

US: The Vanillin substance complies with FDA 21 CFR 117, 21 CFR 182.60: GRAS, FEMA n° 3107

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) No 1169/2011

Rhovani[®] Free Flow is suitable for vegetarian and vegan diets.

Rhovani[®] Free Flow meets the requirements of Food Chemicals Codex, if tested.

