







THE CRYSTAL WHITE NATURAL ALTERNATIVE TO VANILLA BEANS EXTRACT &/OR SYNTHETIC VANILLIN



RHOVANIL® NATURAL CW, THE MARKET-LEADING UNIVERSAL NATURAL VANILLIN SOLUTION

A SUSTAINABLE TECHNOLOGY:



Bio-sourced ferulic acid from rice



Bioconverted by fermentation NON GMO







SWITCH FROM A SYNTHETIC VANILLIN TO A NATURAL SOLUTION

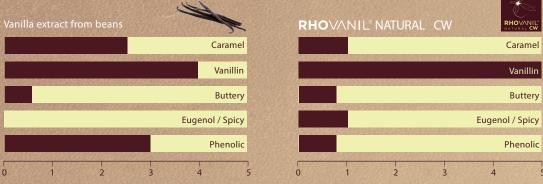
The simple & efficient substitute to secure your business with a limited investment & the same genuine vanillin top note

- PURE AND WHITE NATURAL VANILLIN: 99.5% min
- SAME DOSAGE 1:1 switch, no reformulation cost, same top note profile
- SAME LABELING: Same « vanillin» labeling possibility - Or Opportunity to showcase 'Natural flavour' on your
- SAME REGULATORY COMPLIANCE
- SAME QUALITY AND PERFORMANCE RELIABILITY
- A MARGINAL COST-IN-USE IMPACT in the final product (due to the small amount of natural vanillin



PROTECT YOUR BUSINESS FROM VANILLA BEAN EXTRACT QUALITY & PRICE FLUCTUATIONS The reliable natural source at an affordable price

- QUALITY & TASTE CONSISTENCY:
 - High consistent quality due to a fully mastered bioconversion process



RHOV/NIL® NATURAL CW:

A UNIVERSAL NATURAL LABELING (EU & US COMPLIANCE)

As far as flavoring substances are concerned, the following regulations are in force:



EU REGULATIONS (EC 1334/2008)

`	Vanilla bean	Ferulic acid from rice bran			Compliant	Non compliant
Vanillin source Criteria		RHOVANILE NATURAL CW	Eugenol	Curcumin	Catechol	Lignin
1. Natural raw material	Vanilla bean	Ferulic acid from rice - Non GMO	4	4	×	X
2. Traditional process*	Extraction	Fermentation	X	Synthetic	c process	X
3. Final substance present in nature	✓	✓	~	~	~	~
	Natural flavouring substance					



LABELING IN EUROPE: NATURAL FLAVOURING/ FLAVOUR/ VANILLA FLAVOUR/VANILLIN

*Authorized traditional food preparation processes highlighted in Annex II of EC 1334/2008 include extraction, distillation, fermentation, microbiological processes, heating, cooking, baking, frying (up to 240°C at atmospheric pressure) and pressure cooking (up to 120°C).



US REGULATIONS FDA 21 CFR 101.22 & USDA'S NOP & TTB (ALCOHOL AND TOBACCO TAX AND TRADE BUREAU)

FDA	Natural raw material Allowed natural process**	**According to the FDA regulations, the allowed natural processes are the following: "essential oil, oleoresin, essence or extractive, () eggs, dairy products, or fermentation products thereof".	
TTB	Natural process	«Ex-ferulic vanillin made by bioconversion has been determined to be a natural process resulting in a natural product.»	RHOVANILE MATURAL CW
USDA	Compliant with USDA standards	«The National Organic Program (NOP), part of USDA service, has regulatory oversight responsibilities over the USDA organic standards.»	USDA



LABELING IN THE US: VANILLIN/ VANILLIN DERIVED BY A NATURAL PROCESS

FOCUS ON INNOVATIVE NATURAL VANILLIN BASED SOLUTIONS

- REPLACE VANILLIN OR VANILLA BEAN EXTRACT IN DEMANDING FOOD APPLICATIONS
- BENEFIT FROM FUNCTIONS SUCH AS MASKING OFF NOTES AND MOUTHFEEL EFFECT





Based on RHOV/\NIL*NATURAL



Based on vanilla bean extract Cost-effective alternative Consistent taste performance matching the bean extracts profile

Contact our Team to know more about the most appropriate solutions for your challenges: product.info@solvay.com















