

Safety Data Sheet

EuroVanillin Bakery, Dairy, Chocolate, Borrebon

Replaces date: 29/12/2022

Revision date: 08/10/2024

Version: 1.1.0

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Trade name: EuroVanillin Bakery, Dairy, Chocolate, Borrebon

Group name: EuroVanillin Expert

UFI: X193-JHQR-000S-8JW8

1.2. Relevant identified uses of the substance or mixture and uses advised against

Recommended uses: Formulation of flavouring and fragrance compounds

Inadvisable uses: None.

1.3. Details of the supplier of the safety data sheet

Supplier

Company: Borregaard AS
Address: P.O. Box 162
City: 1701 Sarpsborg
Country: NORWAY
E-mail: sds@borregaard.com
Phone: + 47 69 11 80 00
Fax: + 47 69 11 87 70

1.4. Emergency Telephone Number

Members of the public: 111 (NHS 111 (Scotland: NHS 24)). 112 (Emergency no) (24 h)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

CLP-classification: Eye Irrit. 2;H319

Most serious harmful effects: Causes serious eye irritation.

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2.2. Label elements

Pictograms



Signal word: Warning

Contains

Substance: Ethyl vanillin; Vanillin;

Hazard statements

H319 Causes serious eye irritation.

Precautionary statements

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P337+313 If eye irritation persists: Get medical advice/attention.

P264 Wash hands thoroughly after handling.

2.3. Other hazards

May form explosible dust-air mixture if dispersed.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Substance	CAS No./ EC No./ UK-REACH Reg. No.	Concentration	Notes	CLP-classification
Ethyl vanillin	121-32-4 204-464-7 01-2119958961-24	25 - 50 %		Eye Irrit. 2;H319
Vanillin	121-33-5 204-465-2 01-2119516040-60	1 - 25 %		Eye Irrit. 2;H319

Please see section 16 for the full text of H- / EUH-phrases.

SECTION 4: First aid measures

4.1. Description of first aid measures

Inhalation: Seek fresh air, wash out mouth with water and blow nose thoroughly. Seek medical advice in case of persistent discomfort.

Ingestion: Wash out mouth thoroughly and drink 1-2 glasses of water in small sips. Induce vomiting if victim is conscious. Seek medical advice in case of discomfort.

Skin contact: Immediately remove contaminated clothing. Wash the skin thoroughly with water and continue washing for a long time. Wash contaminated clothing before reuse.

Eye contact: Open eye wide, remove any contact lenses and flush immediately with water (preferably using eye wash equipment). Seek medical advice immediately. Continue flushing until medical attention is obtained.

4.2. Most important symptoms and effects, both acute and delayed

Irritating to eyes. Causes a burning sensation and tearing.

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4.3. Indication of any immediate medical attention and special treatment needed

Flush with water (preferably using eye wash equipment) until irritation subsides. Seek medical advice if symptoms persist.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media: Extinguish with powder, foam, carbon dioxide or water mist.

Unsuitable extinguishing media: Do not use water stream, as it may spread the fire.

5.2. Special hazards arising from the substance or mixture

Avoid formation of dust.

5.3. Advice for firefighters

If there is a risk of exposure to vapour and flue gases, a self-contained breathing apparatus must be worn.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

For non-emergency personnel: Provide good ventilation. Wear safety goggles if there is a risk of dust contact with eyes.

6.2. Environmental precautions

Prevent spillage from entering drains and/or surface water.

6.3. Methods and material for containment and cleaning up

Contain and absorb spill with sand or other absorbent material and transfer to suitable waste containers. Rinse with water. Do not sweep - use vacuum cleaner to collect spillage.

6.4. Reference to other sections

See section 13 for instructions on disposal.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid formation of dust. Work processes where generation of dust may occur must be performed under effective process ventilation (e.g. local exhaust ventilation). Running water and eye wash equipment must be available. Wash hands before breaks, before using restroom facilities, and at the end of work. Take precautionary measures against static discharges. Use spark-free tools and explosion proof equipment.

7.2. Conditions for safe storage, including any incompatibilities

Store in a dry, cool, well-ventilated area. Do not expose to heat (e.g. sunlight). Take precautionary measures against static discharges. Use spark-free tools and explosion proof equipment.

7.3. Specific end use(s)

None.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

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Occupational exposure limit

Substance name	Time period	ppm	mg/m ³	fiber/cm ³	Remarks	Comments
Ethyl vanillin	8h		5		org.støv	
Water	8h	0	10			

PNEC

Ethyl vanillin, cas-no 121-32-4					
Exposure	Value	Assessment Factor	Extrapolation Method	Note	
PNEC aqua (freshwater)	0.118 mg/l				
PNEC sediment (freshwater)	15 mg/kg				
PNEC sediment (marine water)	1.5 mg/kg				
PNEC STP (wastewater-treatment facilities)	10 mg/l				
PNEC aqua (marine water)	0.0118 mg/l				
Vanillin, cas-no 121-33-5					
Exposure	Value	Assessment Factor	Extrapolation Method	Note	
PNEC soil	19,56 mg/kg soil dw				
PNEC aqua (freshwater)	0,118 mg/l				
PNEC aqua (marine water)	0,0118 mg/l				
PNEC STP (wastewater-treatment facilities)	10,0 mg/l				
PNEC sediment (marine water)	5,822 mg/l				

DNEL - workers

Ethyl vanillin, cas-no 121-32-4					
Exposure	Value	Assessment Factor	Dose Descriptor	Main Impact Parameter	Note
Inhalation DNEL (long-term exposure - systemic effects)	49 mg/m ³				
Inhalation DNEL (acute/short-term exposure - systemic effects)	98 mg/m ³				
Dermal DNEL (long-term exposure - systemic effects)	7 mg/kg bw/day				

DNEL - general population

Ethyl vanillin, cas-no 121-32-4					
Exposure	Value	Assessment Factor	Dose Descriptor	Main Impact Parameter	Note
Inhalation DNEL (long-term exposure - systemic effects)	8.75 mg/m ³				
Inhalation DNEL (acute/short-term exposure - systemic effects)	17.5 mg/m ³				
Dermal DNEL (long-term exposure - systemic effects)	2.5 mg/kg bw/day				

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Oral DNEL (long-term exposure - systemic effects)	2.5 mg/kg bw/day				
Vanillin, cas-no 121-33-5					
Exposure	Value	Assessment Factor	Dose Descriptor	Main Impact Parameter	Note
Oral DNEL (acute/short-term exposure - systemic effects)	10 mg/kg/day				

Other Information: Avoid formation of dust.

8.2. Exposure controls

Exposure controls: All work must be carried out under well-ventilated conditions. Wash hands before breaks, before using restroom facilities, and at the end of work. Do not eat, drink or smoke during work. Remove contaminated clothing. Carefully remove as much of the product from the skin as possible, using a cloth. Wash skin thoroughly with soap and lukewarm water and apply skin cream. Seek medical advice in case of eczema.

Appropriate engineering controls: Provide good ventilation. Running water and eye wash equipment must be available.

Personal protective equipment, eye/face protection: Wear safety goggles if there is a risk of dust contact with eyes.

Personal protective equipment, skin protection: Wear suitable protective clothing.

Personal protective equipment, hand protection: Wear gloves.

Personal protective equipment, respiratory protection: Wear respiratory protective equipment with P2 filter when performing dusty work.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Parameter	Value/unit
State	Powder Crystals
Colour	White Yellowish
Odour	Characteristic
Solubility	Soluble in the following: Organic solvents.

Parameter	Value/unit	Remarks
Odour threshold	No data	
Melting point	65 °C	Ethyl vanillin
Freezing point	65 °C	Ethyl vanillin
Initial boiling point and boiling range	285 °C	Ethyl vanillin
Flammability (solid, gas)		Not flammable, but combustible.
Flammability limits		Not flammable.
Explosion limits	No data	
Flash Point	93 - 100 °C	Ethyl vanillin
Auto-ignition temperature	No data	
Decomposition temperature:	No data	
pH (solution for use)	No data	
pH (concentrate)	No data	
Kinematic viscosity	No data	
Viscosity	No data	

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Partition coefficient n-octanol/water	1.58	Ethyl vanillin
Vapour pressure	0.0003 kPa	Ethyl vanillin
Density	1.05 g/cm ³	
Relative density	No data	
Relative vapour density	No data	
Relative density (sat. air)	No data	
Particle characteristics	< 0.063	Median equivalent diameter volume-based in mm

9.2. Other information

Parameter	Value/unit	Remarks
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Other Information: May form explosible dust-air mixture if dispersed.

MIE (Capacitive): 30-100 mJ
MIE (Inductive): 10-30 mJ
MIT: 360 °C
Pmax: 7.3 bar
Kst: 223 bar*m/s
ST class: 2

SECTION 10: Stability and reactivity

10.1. Reactivity

No known data.

10.2. Chemical stability

Avoid direct sunlight. The substance is stable when used in accordance with the supplier's directions.

10.3. Possibility of hazardous reactions

None known.

10.4. Conditions to avoid

Avoid formation of dust.

10.5. Incompatible materials

Strong alkalis/ Strong oxidisers/ Strong acids/ Metals/

10.6. Hazardous decomposition products

Carbon monoxide and carbon dioxide.

SECTION 11: Toxicological information

11.1. Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity - oral

Ethyl vanillin, cas-no 121-32-4

Organism	Test Type	Exposure time	Value	Conclusion	Test method	Source
Rat	LD50		> 3160 mg/kg		OECD 401	REACH dossier

Vanillin, cas-no 121-33-5

Organism	Test Type	Exposure time	Value	Conclusion	Test method	Source
Rat	LD50		> 3925 mg/kg		OECD 423	REACH dossier

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Based on existing data, the classification criteria are deemed not to have been met.

Acute toxicity - dermal

Ethyl vanillin, cas-no 121-32-4

Organism	Test Type	Exposure time	Value	Conclusion	Test method	Source
Rat	LD50		> 2000 mg/kg		OECD 402	REACH dossier

Vanillin, cas-no 121-33-5

Organism	Test Type	Exposure time	Value	Conclusion	Test method	Source
Rat	LD50		> 2000 mg/kg		OECD 402	REACH dossier

Based on existing data, the classification criteria are deemed not to have been met.

Acute toxicity - inhalation: Based on existing data, the classification criteria are deemed not to have been met.

Skin corrosion/irritation

Ethyl vanillin, cas-no 121-32-4

Organism	Test Type	Exposure time	Value	Conclusion	Test method	Source
Rabbit				Non-irritating	OECD 404	REACH dossier

Vanillin, cas-no 121-33-5

Organism	Test Type	Exposure time	Value	Conclusion	Test method	Source
Rat				Non-irritating	EU Method B.3	REACH dossier

May irritate the skin - may cause reddening.

Serious eye damage/eye irritation

Ethyl vanillin, cas-no 121-32-4

Organism	Test Type	Exposure time	Value	Conclusion	Test method	Source
Rabbit				Slightly irritating.	OECD 405	REACH dossier

Vanillin, cas-no 121-33-5

Organism	Test Type	Exposure time	Value	Conclusion	Test method	Source
Rabbit				Irritating	OECD 405	REACH dossier

Irritating to eyes. Causes a burning sensation and tearing.

Respiratory sensitisation or skin sensitisation

Ethyl vanillin, cas-no 121-32-4

Organism	Test Type	Exposure time	Value	Conclusion	Test method	Source
Mouse				Non-sensitising	OECD 429	REACH dossier

Vanillin, cas-no 121-33-5

Organism	Test Type	Exposure time	Value	Conclusion	Test method	Source
Guinea pig				Non-sensitising	EU Method B.6 (Skin Sensitisation)	REACH dossier

Based on existing data, the classification criteria are deemed not to have been met.

Germ cell mutagenicity

Ethyl vanillin, cas-no 121-32-4

Organism	Test Type	Exposure time	Value	Conclusion	Test method	Source
				No mutagenic effects observed.	Ames test	REACH dossier

Vanillin, cas-no 121-33-5

Organism	Test Type	Exposure time	Value	Conclusion	Test method	Source
				No mutagenic effects observed.	Ames test	REACH dossier

Based on existing data, the classification criteria are deemed not to have been met.

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Carcinogenic properties: Based on existing data, the classification criteria are deemed not to have been met.

Reproductive toxicity: Based on existing data, the classification criteria are deemed not to have been met.

Single STOT exposure: Based on existing data, the classification criteria are deemed not to have been met.

Repeated STOT exposure: Based on existing data, the classification criteria are deemed not to have been met.

Aspiration hazard: Based on existing data, the classification criteria are deemed not to have been met.

11.2. Information on other hazards

Endocrine disrupting properties: None known.

Other toxicological effects: Ref.: BIBRA Toxicity Profile, 1988. Acceptable daily intake (ADI) for human is intended for 0-10 mg/kg/day (The Joint FAO/WHO Expert Committee on Food Additives.)

SECTION 12: Ecological information

12.1. Toxicity

Ethyl vanillin, cas-no 121-32-4

Organism	Species	Exposure time	Test Type	Value	Conclusion	Test method	Source
Fish	Pimephales promelas		96hEC50	~ 87.6 mg/l		OECD 203	REACH dossier
Crustacea	Daphnia magna	48 h	48hEC50	26.2 mg/l			REACH dossier
Algae	Pseudokirchneriella subcapitata	72 h	72hEC50	> 100 mg/l			REACH dossier
Algae	Pseudokirchneriella subcapitata	72 h	72hNOEC	21.2 mg/l			
Bacteria	Tetrahymena pyriformis	40 h		158.7 mg/l			REACH dossier

Vanillin, cas-no 121-33-5

Organism	Species	Exposure time	Test Type	Value	Conclusion	Test method	Source
Fish	Pimephales promelas		96hLC50	~ 83.7 mg/l		OECD 203	REACH dossier
Crustacea	Daphnia magna		48hEC50	~ 36.79 mg/l		OECD 202	REACH dossier
Algae	Pseudokirchneriella subcapitata		72hEC50	~ 120 mg/l		OECD 201	REACH dossier

No effect on the environment.

12.2. Persistence and degradability

Ethyl vanillin, cas-no 121-32-4

Organism	Species	Exposure time	Test Type	Value	Conclusion	Test method	Source
					Readily biodegradable.	OECD 301 C	REACH dossier

Vanillin, cas-no 121-33-5

Organism	Species	Exposure time	Test Type	Value	Conclusion	Test method	Source
					Readily biodegradable.	ISO 5815 (Water quality - Determination of BOD5)	

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Test data are not available.

12.3. Bioaccumulative potential

No bioaccumulation expected.

12.4. Mobility in soil

Test data are not available.

12.5. Results of PBT and vPvB assessment

The product does not contain any PBT or vPvB substances.

12.6. Endocrine disrupting properties

None known.

12.7. Other adverse effects

None known.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Do not discharge large quantities of concentrated spills and residue into drains. Collect concentrated spills and major waste in closed, leak-proof containers for disposal at the applicable hazardous waste site with the below specifications.

SECTION 14: Transport information

14.1. UN number or ID number: Not applicable.

14.2. UN proper shipping name: Not applicable.

14.3. Transport hazard class(es): Not applicable.

14.4. Packing group: Not applicable.

14.5. Environmental hazards: Not applicable.

14.6. Special precautions for user

None.

14.7. Maritime transport in bulk according to IMO instruments

Not applicable.

SECTION 15: Regulatory information

15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

Special Provisions: ADR/RID, Regulation (EU) 2020/878, REACH (EC 1907/2006), GHS/CLP (EC NO1272/2008), GHS USA May, 2024.

15.2. Chemical Safety Assessment

UK-REACH Reg. No.	Substance name
01-2119516040-60	Vanillin
01-2119958961-24	Ethyl vanillin

Other Information: Chemical safety assessments have been performed for the following substances:
Ethylvanillin.
Vanillin.

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SECTION 16: Other information

Version history and indication of changes

Version	Revision date	Responsible	Changes
1.1.0	08/10/2024	Borregaard AS	General review and update
1.0.0	29/12/2022	Borregaard AS	Section 1, 9, 11, 12

Vendor notes:

Information given in this safety data sheet is in accordance with our information, and to the best of our knowledge, was correct on the last revision date. Information given is intended to present guidelines for safe handling, use, processing, storage, transport, disposal and discharge; it is not intended to be a guarantee or quality specification. It is the responsibility of the recipient of this safety data sheet to ensure that information given here is read and understood by all who use, handle, dispose of or in any way come in contact with the product.

Hazard statements

H319

Causes serious eye irritation.

Country:

GB