

Safety Data Sheet

EuroVanillin Caramel

Issued: 28/02/2020

Version: 1.0.0

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

1.1. Product identifier

Trade name: EuroVanillin Caramel

Group name: EuroVanillin Expert

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

Recommended uses: Formulation of flavouring and fragrance compounds

See enclosed exposure scenarios for further information.

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))

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.

2.2. Label elements

Pictograms



Signal word: Warning

Contains

Substance: Ethyl vanillin; Vanillin

H-phrases

H319 Causes serious eye irritation.

P-phrases

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

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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	REACH Reg. No.	Concentration	Notes	CLP-classification
Ethyl vanillin	121-32-4	204-464-7	01-2119958961-24	30 - 40%		Eye Irrit. 2;H319
Vanillin	121-33-5	204-465-2	01-2119516040-60	1 - 10%		Eye Irrit. 2;H319

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

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

Treat symptoms.

SECTION 5: Fire-fighting 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 fire-fighters

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

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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. Take precautionary measures against static discharges. Use spark-free tools and explosion proof equipment.

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

Occupational exposure limit

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

PNEC

Exposure	Value	Assessment Factor	Extrapolation Method	Note
PNEC aqua (freshwater)	0.118 mg/l			
PNEC aqua (marine water)	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			

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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				
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				

8.2. Exposure controls

Exposure controls: See enclosed exposure scenarios for further information.

Appropriate engineering controls: Provide good ventilation. Running water and eye wash equipment must be available. Wear the personal protective equipment specified below.

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

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

Personal protective equipment, hand protection: No specific hand protection noted, but gloves may still be advisable.

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.
Explosive properties	Non-explosive
Oxidising properties	Non-oxidising.

Parameter	Value/unit	Remarks
pH (solution for use)	No data	
pH (concentrate)	No data	
Melting point	76 - 78 °C	
Freezing point	No data	
Initial boiling point and boiling range	285 °C	
Flash Point	> 160 °C	
Evaporation rate		Not relevant. The product is a powder.
Flammability (solid, gas)	No data	
Flammability limits	No data	
Explosion limits	No data	
Vapour pressure	0.0029 kPa	
Vapour density	No data	
Relative density	No data	
Partition coefficient n-octanol/water	No data	
Auto-ignition temperature	No data	
Decomposition temperature	No data	
Viscosity	cSt	Not relevant. The product is a powder.
Odour threshold	No data	

9.2 Other information

Parameter	Value/unit	Remarks
Density	1.05 g/cm ³	
Molecular weight	166,19	

Other Information: Ref. : Hawley's Condensed Chemical Dictionary, 12th Edition; BIBRA Toxicity Profile, 1988; personal analysis / experience

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.

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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 toxicological effects

Acute toxicity - oral

Ethyl vanillin, cas-no 121-32-4

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

Vanillin, cas-no 121-33-5

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

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		> 2000mg/kg		OECD 402	REACH dossier

Vanillin, cas-no 121-33-5

Organism	Test Type	Exposure time	Value	Conclusion	Test method	Source
Rat	LD50		> 2000mg/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

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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.

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	~ 87.6mg/l		OECD 203	REACH dossier
Crustacea	Daphnia magna	48 h	48hEC50	26.2mg/l			REACH dossier
Algae	Pseudokirchneriella subcapitata	72 h	72hEC50	> 100mg/l			REACH dossier
Algae	Pseudokirchneriella subcapitata	72 h	72hNOEC	21.2mg/l			
Bacteria	Tetrahymena pyriformis	40 h		148.7mg/l			REACH dossier

Vanillin, cas-no 121-33-5

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

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Algae	Pseudokirchneriella subcapitata		72hEC50	~ 120mg/l		OECD 201	REACH dossier
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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)	

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. 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-No.: 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. Transport in bulk according to Annex II of MARPOL and the IBC Code

Not applicable.

SECTION 15: Regulatory information

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

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Special Provisions: ADR/RID (2017), GHS / CLP (EC NO1272/2008)

15.2. Chemical Safety Assessment

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.

SECTION 16: Other information

Version history and indication of changes

Version	Revision date	Responsible	Changes
1.0.0	28/02/2020	Borregaard AS	Initial release

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.

List of relevant H-statements

H319 Causes serious eye irritation.

Document language: GB