

VinoCrush Classic

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

1.1 Product Identifier

Product Name	VinoCrush® Classic
Chemical Name	Enzyme preparation
Declared activity	Polygalacturonase

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

Novozymes' enzyme preparations are biocatalysts used in a variety of industrial processes within food manufacturing

1.3 Details of the supplier of the safety data sheet

Novozymes A/S
Krogshøjvej 36
2880 Bagsvaerd
Denmark
Tel.: +45 44460000
Fax.: +45 44469999
E-mail: SafetyDataSheet@novozymes.com
www.novozymes.com

1.4 Emergency telephone number

+45 44462223 (24/7)

SECTION 2: Hazard identification

2.1 Classification of the substance or mixture

Regulation (EC) No 1272/2008

Respiratory Sensitization	Category 1
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2.2 Label elements



Contains Polygalacturonase (aep)

Signal Word
Danger

Hazard Statements
H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled

Precautionary Statements
P261 - Avoid breathing dust/fume/gas/mist/vapours/spray

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P342 + P311 - If experiencing respiratory symptoms: Call a POISON CENTRE or doctor/physician
P304 + P341 - IF INHALED: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing
P308 + P313 - IF exposed or concerned: Get medical advice/attention

2.3 Other hazards

Human health effects

Repeated inhalation of enzyme dust or aerosols resulting from improper handling may induce sensitization and may cause allergic type 1 reactions in sensitized individuals
Mild skin irritation
Mild eye irritation

Effects of overexposure
See Section 4

The mixture does not meet the criteria for PBT or vPvB.
See Section 11 and 12 for additional Toxicological information

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Chemical name	Weight-%	CAS No	EC No.	CLP Classification (No 1272/2008)
Polygalacturonase (aep)	1 - 2.5	9032-75-1	232-885-6	Resp. Sens. 1;H334

Active enzyme protein (aep) is the part of the enzyme concentrate contributing to the classification of the mixture.

Regulatory information *

Chemical name	Weight-%	IUB No.	REACH Registration No
Polygalacturonase	5 - 10	3.2.1.15	-

*: In the scope of REACH registration enzymes are defined as enzyme concentrate (dry matter basis)

For the full text of the H-statements mentioned in this Section , see Section 16

SECTION 4: First aid measures

4.1 Description of first aid measures

Inhalation

Effects

May cause allergic respiratory reaction

Symptoms

Shortness of breath, wheezing and coughing
The effect of inhalation may be delayed

First Aid

Remove person to fresh air. If signs/symptoms continue, get medical attention
Show this safety data sheet to the doctor in attendance

Skin Contact

Effects

May cause slight irritation

Symptoms

Slight irritation

First Aid

Remove and wash contaminated clothing before re-use. Wash off immediately with plenty of water. If symptoms persist, call a doctor. Show this safety data sheet to the doctor in attendance.

Eye Contact

Effects

May cause slight irritation

Symptoms

Slight irritation

First Aid

Hold eye open and rinse slowly and gently with water for 15-20 min. Remove contact lenses, if present, after the first five minutes, then continue rinsing eye. If symptoms persist, call a doctor. Show this safety data sheet to the doctor in attendance

Ingestion

Effects

Ingestion may cause gastrointestinal irritation.

Symptoms

Irritation

First Aid Rinse mouth with water and drink plenty of water. If symptoms persist, call a doctor. Show this safety data sheet to the doctor in attendance.

4.2 Most important symptoms and effects, both acute and delayed

See section 4.1

4.3 Indication of any immediate medical attention and special treatment needed

Notes to Physician Treat symptomatically

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable Extinguishing Media Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide

Unsuitable Extinguishing Media None

Hazardous Combustion Products None

5.2 Special hazards arising from the substance or mixture

May cause allergic respiratory reaction

5.3 Advice for firefighters

Self-contained breathing apparatus

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For personal protection see section 8

6.2 Environmental Precautions

Collect spillage

6.3 Methods and material for containment and cleaning up

Avoid formation of dust and aerosols

Spilled preparation should be removed immediately to avoid formation of dust from dried preparation. Take up by mechanical means preferably by a vacuum cleaner equipped with a high efficiency filter. Flush remainder carefully with plenty of water. Avoid splashing and high pressure washing (avoid formation of aerosols). Ensure sufficient ventilation. Wash contaminated clothing.

6.4 Reference to other sections

For personal protection see section 8

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Avoid formation of dust and aerosols

Ensure adequate ventilation

Liquid enzyme preparations are dustfree preparations However, inappropriate handling may cause formation of dust or aerosols

7.2 Conditions for safe storage, including any incompatibilities

Keep tightly closed in a dry and cool place The product can be transported at ambient temperature. Following delivery, the product should be stored as recommended. 0-10 °C (32-50 °F)

7.3 Specific end use(s)

Handle in accordance with good industrial hygiene and safety practice

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SECTION 8: Exposure controls/personal protection

8.1 Control parameters

DNEL/DMEL/PNEC

Chemical name	DNEL Dermal Acute Local (Workers)	DMEL Inhalation Long term Local (Workers)
Polygalacturonase (aep)		DMEL = 60 ng/m ³

Derived Minimal Effect Level (DMEL)

8.2 Exposure controls

Ensure adequate ventilation, especially in confined areas

Personal Protective Equipment

Respiratory protection	In case of insufficient ventilation wear an approved mask with a particle filter type P3 used according to the manufactures instruction
Eye Protection	Wear safety glasses with side shields (or goggles)
Skin Protection	Long sleeved clothing
Hand Protection	Skin should be washed after contact
General Hygiene Considerations	Handle in accordance with good industrial hygiene and safety practice
Environmental exposure controls	Local authorities should be advised if significant spillages cannot be contained

Waste water should be discharged to sewage treatment plant

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical State	Liquid
Colour	Brown
Odour	Slight fermentation odor
Density (g/ml)	1.17
pH	Adjusted to the range where active enzyme is stable – typically pH 4 – 9
Solubility	Active component is readily soluble in water at all concentrations that occur in normal usage. Standardisation components can cause turbidity in solution.

9.2 Other information

No information available

SECTION 10: Stability and reactivity

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10.1 Reactivity

Not relevant

10.2 Chemical stability

Stable under recommended storage conditions

10.3 Possibility of hazardous reactions

None under normal processing

10.4 Conditions to avoid

None

10.5 Incompatible materials

None

10.6 Hazardous decomposition products

None

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Chemical name	Acute oral toxicity	Respiratory sensitisation	Genetic toxicity	Skin corrosion/irritation	Serious eye damage/eye irritation
Polygalacturonase (aep)	LD50: > 2000 mg/kg bw (OECD TG 401, 420)	Sensitizer (Human experience)	No indication of mutagenic effects (OECD TG 471, 476, 487)	Not irritating (OECD TG 404)	Not irritating (OECD TG 405)

SECTION 12: Ecological information

12.1 Toxicity

Chemical name	Daphnia, acute	Acute fish toxicity =	Algae, Acute
Polygalacturonase (aep)	EC50 (48 hours): 31.7 - 457 mg aep/l (OECD TG 202)	LC50 (96 hours): 58.3 - 326.7 mg aep/l (OECD TG 203)	ErC50 (72 hours): >= 5.2 mg aep/l (OECD TG 201)

12.2 Persistence and degradability

Chemical name	Persistence and degradability	Partition coefficient (n-octanol/water)
Polygalacturonase (aep)	Readily biodegradable (OECD 301)	LogPow: <0

12.3 Bioaccumulative potential

Chemical name	Bioaccumulative potential
Polygalacturonase (aep)	Does not bioaccumulate

12.4 Mobility in soil

Not relevant

12.5 Results of PBT and vPvB assessment

The components in this formulation do not meet the criteria for classification as PBT or vPvB

12.6 Other adverse effects

No information available

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SECTION 13: Disposal considerations

13.1 Waste treatment methods

Dispose of in accordance with local regulations

Waste water should be discharged to sewage treatment plant

Waste codes should be assigned by the user based on the application for which the product was used

SECTION 14: Transport information

Transport Regulations

No dangerous goods according to transport regulations

No special precautions required

14.1

UN 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 Not applicable

14.7

Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not applicable

SECTION 15: Regulatory information

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

WGK Classification 1

The product complies with the recommended purity specifications for food-grade enzymes given by the Joint FAO/WHO Expert Committee on Food Additives (JECFA) and the Food Chemical Codex (FCC).

15.2 Chemical Safety Report

Chemical Safety Assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Full text of H-Statements referred to under sections 2 and 3

H334 - May cause allergy or asthma symptoms or breathing difficulties if inhaled

CLP Classification

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Further information

For further information please consult available product documentation including 'Product Application Guidelines' and/or 'Application Sheets', which are available on market.mynovozymes.com or from Novozymes sales representatives.

Training advice

Details on the safe handling of this product can be found in the "Handling enzymes" on market.novozymes.com

Disclaimer

The information provided on this SDS is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guide for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered as a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text. Furthermore, as the conditions of use are beyond the control of Novozymes, it is the responsibility of the customer to determine the conditions of safe use of these products.

End of Safety Data Sheet

Version No: 3 / EU / 2017/10/04

Conditions and measures related to municipal sewage treatment plant	
Conditions and measures related to external treatment of waste for disposal	
Conditions and measures related to external recovery of waste	

3. Exposure estimation and reference to its source
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4. Guidance to DU to evaluate whether he works inside the boundaries set by the ES
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1. Title	
Free short title	
Systematic title based on use descriptor	
Processes, tasks activities covered	

2. Operational conditions and risk management measures
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2.1 Control of workers exposure	
Product characteristic	Product characteristic