

ENOVIT

Issued on 10/18/2023 - Rel. # 5 on 10/18/2023

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In conformity to Regulation (EU) 2020/878

SECTION 1. Identification of the substance/mixture and of the company/enterprise

1.1. Product identifier

Product name : ENOVIT Product code: refer to sales department

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

Bioregulators and nutrients Sectors of use: Manufacture of food products[SU4] Product category: Process aid for enological use

Not recommended uses Do not use for purposes other than those listed

1.3. Details of the supplier of the safety data sheet

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Produced by AEB SpA Via Vittorio Arici 104 S. Polo 25134 Brescia

1.4. Emergency telephone number

AEB SpA Centralino/Switchboard: +39.030.2307.1 - (h 8.30-12.00 13.30-18.00 GMT +1; Lingua/Language: Italiano, English)



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AEB USA

Switchboard: +1 2096258139 (GMT -8; Language: English)

AEB AFRICA (PTY) LTD Switchboard: +27 215512700 (GMT +1; Language: English, Afrikaans)

AEB OCEANIA PTY LTD Switchboard: +61 1300 704 971 (GMT +9; Language: English)

SECTION 2. Hazards identification

2.1. Classification of the substance or mixture

2.1.1 Classification according to Regulation (EC) No 1272/2008:

Pictograms: None

Hazard Class and Category Code(s): Non hazardous

Hazard statement Code(s): Non hazardous

2.2. Label elements

Labelling according to Regulation (EC) No 1272/2008:

Pictogram, Signal Word Code(s): None

Hazard statement Code(s): Non hazardous

Supplemental Hazard statement Code(s): EUH210 - Safety data sheet available on request.

Precautionary statements: None in particular.

Contains:

Ingredients: ammonium sulphate, diammonium hydrogen phosphate*, excipient, thiamine hydrochloride (vitamin B1) 0,20%.

Food use, oenological use. Not intended In accordance with current regulations on the specific matter.

*alternative name: ammonium biphosphate.

2.3. Other hazards

Based on the available data, no PBT or vPvB substances are present in accordance with Regulation (EC) 1907/2006, annex XIII

SECTION 3. Composition/information on ingredients



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3.1 Substances

Irrilevant

3.2 Mixtures

No dangerous substance to report.

Substance	Concentration[w/w]	Classification	Index	CAS	EINECS	REACh
PERLITE substance for which there are Community workplace exposure limits	>= 3 < 5%			93763-70-3		

SECTION 4. First aid measures

4.1. Description of first aid measures

Inhalation:

Ventilate the area. Move immediately the contaminated patient from the area and keep him at rest in a well ventilated area. If you feel unwell seek medical advice.

Direct contact with skin (of the pure product).:

Wash thoroughly with soap and running water.

Direct contact with eyes (of the pure product).:

Wash immediately and thorougly with running water for at least 10 minutes.

Ingestion:

Not dangerous. In case of malaise consult a doctor.

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

Eye contact may cause irritation, including redness and tear. The product is not irritating to the skin; However, repeated and prolonged direct contact may degrade and irritate the skin, causing in some cases dermatitis. The ingested product can cause irritation of the throat and digestive tract mucous, resulting in abnormal digestive symptoms and intestinal disorders. The inhaled product may cause respiratory irritation for repeated exposures.

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

No data available.

SECTION 5. Firefighting measures

5.1. Extinguishing media

Suggested extinguishing media:

Water spray, CO2, foam, dry chemical, depending on the materials involved in the fire.



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Extinguishing media to avoid:

Water jets. Use water jets only to cool the surfaces of the containers exposed to fire.

5.2. Special hazards arising from the substance or mixture

No data available.

5.3. Advice for firefighters

Use protection for the breathing apparatus

Safety helmet and full protective clothing.

The water spray can be used to protect the people involved in the extinction.

You may also use self-contained breathing apparatus, especially when working in confined and poorly ventilated areas. Keep containers cool with water spray

SECTION 6. Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1 For non-emergency personnel: Leave the area surrounding the spill or release. Do not smoke Wear gloves and protective clothing

6.1.2 For emergency responders: Eliminate all unguarded flames and possible sources of ignition. No smoking. Privide a sufficient ventilation. Evacuate the danger area and, in case, consult an expert.

6.2. Environmental precautions

Contain spills Inform the competent authorities. Dispose of the waste material in compliance with the regulations

6.3. Methods and material for containment and cleaning up

6.3.1 Containment: Recover the product for reuse, if possible, or for elimination.

6.3.2 Cleaning up: After wiping up, wash with water the area and materials involved

6.3.3 Other information: None in particular.

6.4. Reference to other sections

Refer to paragraphs 8 and 13 for more information

SECTION 7. Handling and storage



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7.1. Precautions for safe handling

At work do not eat or drink. See also paragraph 8 below.

7.2. Conditions for safe storage, including any incompatibilities

Keep in original container closed tightly. Do not store in open or unlabelled containers. Keep containers upright and safe by avoiding the possibility of falls or collisions. Store in a cool and dry place, away from heat sources and direct exposure to sunlight.

7.3. Specific end use(s)

Manufacture of food products: Handle with care. Store in a clean, dry, ventilated area away from heat and direct sunlight. Keep container tightly closed.

SECTION 8. Exposure controls/personal protection

8.1. Control parameters

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_____
Related to contained substances:
PERLITE:
Perlite: Crystalline Silica
Limit value - 8 hours
(ppm) / (mg / m^3)
Australia: x / 0.05 (1)
Belgium: x / 0.05
Canada - Ontario: x / 0.05 (1)
Canada - Québec: x / 0.05 (1)
South Korea: x / 0.05 (respirable dust)
Denmark: x / 0.15 (1)
    x / 0.05 (2)
Spain: x / 0.05 (1)
France: x / 0.05 respirable aerosol
Hungary: x / 0.15 respirable aerosol
Ireland: x / 0.1 (1)
New Zealand: x / 0.1 (1)
Netherlands: x / 0.075 respirable dust
Poland: x / 0.1 (1)
Singapore: x / 0.05 respirable aerosol
Sweden: x / 0.05 (1)
Switzerland: x / 0.15 respirable aerosol
USA - NIOSH: x / 0.05
USA - OSHA: 0.5 (30 / (% silica + 2))
Limit value - Short term
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(ppm) / (mg / m³) Denmark: x / 0.3 (1) (3) x / 0.1 (2) (3)

Observations Australia: (1) Respirable fraction. Canada - Ontario: (1) Breathable aerosol. Canada - Québec: (1) Respirable fraction.



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	Denmark: (1) Inhalable fraction (2) Respirable fraction (3) 15 minute mean value. France: Restrictive legal limit values. Ireland: (1) Respirable fraction. New Zealand: (1) Breathable aerosol. Poland: (1) Respirable fraction. Spain: (1) Respirable fraction. Sweden: (1) Respirable dust.
	Perlite: Powder Limit value - Eight hours (ppm) / (mg / m3) Australia: $x / 10 (1)$ Austria: $x / 5$ inhalable aerosol Belgium: $x / 10$ Canada - Ontario: $x / 10 (1)$ Canada - Quebec: $x / 10 (total)$ x / 5 (breathable) South Korea: $x / 10$ Latvia: $x / 4 (1)$ People's Republic of China: $x / 8 (1)$ x / 4 (2) Singapore: $x / 10$ USA - NIOSH: $x / 10$ total dust x / 5 respirable fraction.
	Limit value - Short term (ppm) / (mg / m3) Australia: x / x Austria: $x / 10$ inhalable aerosol Belgium: x / x Canada - Ontario: x / x Canada - Quebec: x / x South Korea: x / x Latvia: x / x People's Republic of China: x / x Singapore: x / x USA - NIOSH: x / x
	Notes: Australia: (1) This value is for inhalable dust that does not contain asbestos and <1% crystalline

Australia: (1) This value is for inhalable dust that does not contain asbestos and <1% crystalline silica. Canada - Ontario: (1) This value is for inhalable dust that does not contain asbestos and <1% crystalline silica Latvia: (1) and tuff, pemza.

People's Republic of China: (1) Inhalable fraction (2) Respirable fraction.

Perlite has not been classified separately by the Occupational Safety and Health Administration (OSHA). However, the product contains crystalline silica in the form of quartz powder below 0.1%. In 2011 the International Agency for Research on Cancer (IARC) concluded that crystalline silica in the form of quartz or cristobalite powder is carcinogenic to humans (Group 1).

8.2. Exposure controls

Appropriate engineering controls: Manufacture of food products: No specific monitoring foreseen (act according to good practice and specific rules for the type of risk associated)



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8.2.2 Individual protection measures:

(a) Eye / face protection

Not needed for normal use, unless otherwise provided by the employer and / or by assessments of environmental hygiene investigations

(b) Skin protection

(i) Hand protection

Not needed for normal use, unless otherwise provided by the employer and / or by assessments of environmental hygiene investigations

(ii) Other Wear normal work clothing.

(c) Respiratory protection

Not needed for normal use, unless otherwise provided by the employer and / or by assessments of environmental hygiene investigations

(d) Thermal hazards No hazard to report

Environmental exposure controls:

Use according to good working practices and avoid to disperse the product into the environment.

SECTION 9. Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical and chemical properties	Value	Determination method	
Physical state	Granular powder		
Colour	White		
Odour	not determined as considered not relevant for the characterization of the product		
Odour threshold	not determined as considered not relevant for the characterization of the product		
Melting point/freezing point	not determined as considered not relevant for the characterization of the product		
Boiling point or initial boiling point and boiling range	not determined as considered not relevant for the characterization of the product		
Flammability	not determined as considered not relevant for the characterization of the product		
Lower and upper explosion limit	not determined as considered not relevant for the characterization of the product		
Flash point	not determined as considered not relevant for the characterization of the product	ASTM D92	
Auto-ignition temperature	not determined as considered not relevant for the characterization of the product		
Decomposition temperature	not determined as considered not relevant for the characterization of the product		
рН	8,0 ± 0,5 (20°C; sol. 1%)		
Kinematic viscosity	not determined as considered not relevant for the characterization of the product		



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Physical and chemical properties	Value	Determination method	
Solubility	not determined as considered not relevant for the characterization of the product		
Water solubility	not determined as considered not relevant for the characterization of the product		
Partition coefficient n-octanol/water (log value)	not determined as considered not relevant for the characterization of the product		
Vapour pressure	pressure not determined as considered not relevant for the characterization of the product		
Density and/or relative density	0,80 - 0,95 (20 °C)		
Relative vapour density	not determined as considered not relevant for the characterization of the product		
Particle characteristics	not determined as considered not relevant for the characterization of the product		

9.2. Other information

9.2.1 Information with regard to physical hazard classes

No data available.

9.2.2 Other safety characteristics

No data available.

SECTION 10. Stability and reactivity

10.1. Reactivity

No reactivity hazards

10.2. Chemical stability

No hazardous reaction when handled and stored according to provisions.

10.3. Possibility of hazardous reactions

There are no hazardous reactions

10.4. Conditions to avoid

Nothing to report

10.5. Incompatible materials

None in particular



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10.6. Hazardous decomposition products

Decomposed heat emits HCI.

SECTION 11. Toxicological information

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

(a) acute toxicity: PERLITE: Non toxic

(b) skincorrosion/irritation: PERLITE: Not corrosive

PERLITE: Not irritating

(c) serious eye damage/irritation: PERLITE: Not corrosive

PERLITE: Not irritating

(d) respiratoryorskinsensitisation: PERLITE: There is no classification of respiratory or skin sensitivity.

(e) germ cell mutagenicity: PERLITE: Based on available data, the classification criteria are not met.

(f) carcinogenicity: PERLITE: Based on available data, the classification criteria are not met.

(g) eproductivetoxicity: PERLITE: Based on available data, the classification criteria are not met.

(h) specific target organ toxicity (STOT) single exposure: PERLITE: Based on available data, the classification criteria are not met.

(i) specific target organ toxicity (STOT) repeated exposurePERLITE: Based on available data, the classification criteria are not met.

(j) aspiration hazard: PERLITE: Based on available data, the classification criteria are not met.

Health Hazards:

Eye contact: Accidental contact of product with eyes may cause irritation.

Skin Contact: Product is not an irritant. Prolonged or repeated contact may defeat and irritate the skin and cause dermatitis in some cases.

Ingestion: The ingested product may cause irritation of the mucous membranes of the throat and digestive system leading to digestive symptoms and abnormal bowel disorders.

Inhalation: Prolonged exposure to vapours or mists of product may cause respiratory irritation.

Related to contained substances:

PERLITE:

Health Risks Eye Exposure: Accidental contact of the product with the eyes may cause irritation. Skin exposure: the product is not irritating. Repeated and prolonged direct contact can dry and irritate the skin, causing dermatitis in some cases. Ingestion: ingestion of the product may cause irritation of the mucous membranes of the throat and digestive system, resulting in abnormal digestive symptoms and intestinal disorders. Inhalation: Prolonged exposure to vapors or mists from the product may cause irritation of the airways

11.2. Information on other hazards

No data available.

SECTION 12. Ecological information

12.1. Toxicity

Related to contained substances: PERLITE: Not ecotoxic



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Use according to good working practices and avoid to disperse the product into the environment.

12.2. Persistence and degradability

Related to contained substances: PERLITE: Not relevant for inorganic substance

12.3. Bioaccumulative potential

Related to contained substances: PERLITE: Not relevant for inorganic substance

12.4. Mobility in soil

Related to contained substances: PERLITE: Not significant

12.5. Results of PBT and vPvB assessment

Based on the available data, no PBT or vPvB substances are present in accordance with Regulation (EC) 1907/2006, annex XIII

12.6. Endocrine disrupting properties

No data available.

12.7. Other adverse effects

No adverse effects

SECTION 13. Disposal considerations

13.1. Waste treatment methods

Do not reuse empty containers. Dispose of them in accordance with the regulations in force. Any remaining product should be disposed of according to applicable regulations by addressing to authorized companies. Recover if possible. Operate according to local or national regulations

SECTION 14. Transport information

14.1. UN number or ID number

Not included in the field of application of regulations concerning the transport of dangerous goods: by road (ADR); by rail (RID); by air (ICAO / IATA); by sea (IMDG).



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14.2. UN proper shipping name

None

14.3. Transport hazard class(es)

None

14.4. Packing group

None

14.5. Environmental hazards

None

14.6. Special precautions for user

No data available.

14.7. Maritime transport in bulk according to IMO instruments

Transport in bulk is not foreseen

SECTION 15. Regulatory information

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

Restrictions relating to the product or the substances contained (Annex XVII EC Reg. 1907/2006): not applicable Substances in Candidate list (art. 59 EC Reg. 1907/2006): the product does not contain SVHC in percentage = a 0.1 %.

Regulation (EU) 1169/2011: see point 2.2 Regulation (EU) 1308/2013; see point 2.2 Regulation (EC) 1333/2008; see point 2.2

15.2. Chemical safety assessment

No chemical safety assessment was carried out by the supplier

SECTION 16. Other information

16.1. Other information

Points modified compared to previous release: 2.2. Label elements, 9.1. Information on basic physical and chemical properties



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Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

No hazard to report. Classification procedure: Calculation method

Main normative references:

Reg. (CE) n. 1907 del 18/12/06 REACH (Registration, Evaluation and Authorisation of CHemicals) et seq. Reg. (CE) 1272/2008 CLP (Classification Labelling and Packaging) et seq. Directive 2012/18/EU (on the control of major-accident hazards involving dangerous substances) et seq.

Training required: This document must be submitted to the employer to determine the possible need for appropriate training for workers to ensure protection of human health and the environment.

n.a.: not applicable n.d.: not available ADR: Accord europèen relative au transport International des merchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road) ATE: Acute Toxicity Estimat **BFC: BioconCentration Factor BOD:** Biochemical Oxigen Demand CAS: Chemical Abstract Service number CAP: Centre AntiPoison CE/EC number EINECS (European Inventory of existing Commercial Substances) e ELINCS (European List of notified Chemical Substances) CL50/LC50: Lethal Concentration 50 DL50/LD50: Lethal Dose 50 COD: Chemical Oxygen Demand DNEL: Derived No Effect Level EC50: half maximal Effective Concentration ERC: Enviroment Release Classes EU/UE: European Union IATA: International Air Transport Association ICAO: International Civil Aviation Organization IMDG: International Maritime Dangerous Goods code Kow: Octanol water partition coefficient NOEC: No Observed Effect Concentration **OEL: Occupational Exposure Limit** PBT: Persistent Bioaccumulative and Toxic PC: Product Categories PNEC: Predicted No Effect Concentration **PROC:** Process Categories RID: Règlement concernent le transport International ferroviaire des merchandises dangereuses (Regulations concerning International rail transport of dangerous goods) STOT: Target Organ Systemic Toxicity STOT (RE): Repeated Exposure STOT (SE): Single Exposure STP: Sewage Treatment Plants SU: Sector of Use SVCH: Substance of Very High Concern TLV: Threshold Limit Value vPvB: Very Persistent Very Bioaccumulative

References and Sources: - ECHA Registered Substances: https://echa.europa.eu/web/guest/information-on-chemicals/registered-substances

- SDS raw material supplier

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- GESTIS International Limit Value: http://limitvalue.ifa.dguv.de

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*** this tab annuls and replaces any previous edition. (IIXX)

Changes to the previous edition: changes on physical and chemical properties.

Geowin SDS rel. 11