



MATERIAL SAFETY DATA SHEET

RhizoVital® 42I.

(EC) No. 1272/2008

Last review 1.10.2013

1. PRODUCT AND COMPANY IDENTIFICATION

Product name:	RhizoVital® 42 I.
Relevant use:	Microbial biofertilizer, soil enhancer
Supplier:	Horticulture Limited, 10 Firth Street, Drury 2113
Manufacturer:	ABiTEP GmbH, Glienicke Weg 185, 12489, Berlin Deutschland
Telephone:	+64 9 294 8453
Emergency number:	0800 764 766 (National Poisons Centre)

2. HAZARDS IDENTIFICATION

Not classified as hazardous	conform to EEC Dangerous Substance Directive and Dangerous Preparation Directive (1999/45/EEC)
Labeling according to	Regulation EC 67/548, EEC 1999/45 and CLP Regulation (EC) No. 1272/2008
PBT or vPvB substances	None
R(isk) phrases	None
H(azard) statements:	None

3. COMPOSITION/INFORMATION ON INGREDIENTS

No hazardous components according to the regulation (EC) No. 1272/2008
(*Bacillus amyloliquefaciens* ssp. *plantarum*, strain FZB42)

4. FIRST AID MEASURES

Symptoms and effects	No typical symptoms and effects known.
First aid General	In all cases of doubt, or when symptoms persist, seek medical attention.
Inhalation	This is only possible by exposure to HOT product. Move to fresh air, rest, half upright position, loosen clothing. Oxygen or artificial respiration if there is difficulty in breathing. Seek medical advice after significant exposure. Symptomatic treatment is advised
Skin	Remove contaminated clothing. Seek medical advice if irritation develops. Launder clothes before reuse. After contact with skin, wash immediately with plenty of water.
Eye	Rinse thoroughly with plenty of water. Eyelids should be held away from the eyeball to ensure thorough rinsing. Seek medical advice if irritation develops.
Ingestion	If ingested seek medical advice immediately and show this information sheet if possible.
Advice to physician	Symptomatic treatment is advised.

5. FIRE-FIGHTING MEASURES

Extinguishing media	Water mist, foam, dry powder, carbon dioxide.
Unsuitable extinguishing media	Water-jet
Special exposure hazards	Vapors cause coughing.
Hazardous decomposition / combustion products:	Not known.
Protective equipment	No specific recommendations.
Other information	Avoid contact with oxidizing agents. Cool closed containers with water.



MATERIAL SAFETY DATA SHEET

RhizoVital® 42I.

(EC) No. 1272/2008

Last review 1.10.2013

6. ACCIDENTAL RELEASE MEASURES

Personal precautions	The usual precautions for handling chemicals should be observed.
Environmental precautions	No specific recommendations.
Methods for cleaning up	Collect as much as possible in a clean container for (preferable) reuse or disposal.
Other information	For personal protection see section 8.

7. HANDLING AND STORAGE

Handling	The usual precautions for handling chemicals should be observed.
Fire and explosion prevention	No specific recommendations. Avoid contact with oxidizing agents.
Storage requirements	No specific recommendations.
Other information	To maintain quality: Store below 20°C. Avoid elevated temperatures. S1/2, S13, P101, P405

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering controls	The usual precautionary measures for handling chemicals should be observed.
Exposure limits	No exposure limit has been established.
Personal protection	
Respiratory	No specific recommendations.
Hand	No specific recommendations.
Eye	No specific recommendations.
Skin and body	No specific recommendations.
Other information	The usual precautions for handling chemicals should be observed.

9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance	Liquid (20°C)
Odour	Specific earthy
Odour threshold	not determined
pH value	6.5 - 7
Melting point / freezing point	Not freezing
Color	Yellow-brownish
Boiling point/range	Not determined
Flash point	> 100 °C
Evaporation rate	not determined
Flammability	not determined
Vapor pressure	< 0.1 Pa (20°C)
Vapor density	not relevant
Density	approx. 1.03 kg/L (20°C)
Relative vapor density (air=1)	not determined
Solubility in water	Soluble
Solubility in other solvents	not determined
Partition coefficient n-Octanol/water	not determined
Viscosity	12,3 mPa x s
Explosion properties	none known
Oxidizing properties	none known

10. STABILITY AND REACTIVITY

Reactivity	Not reactive
Stability	No decomposition if stored and handled properly.
Conditions to avoid	Temperature > 100°C.
Materials to avoid	Avoid contact with oxidizing agents.



MATERIAL SAFETY DATA SHEET

RhizoVital® 42I.

(EC) No. 1272/2008

Last review 1.10.2013

Hazardous decomposition products No.

11. TOXICOLOGICAL INFORMATION

Name	RhizoVital® 42 I
Acute toxicity	Oral LD50 > 2000 mg/kg b.w., p.o (Lit.)
Skin corrosion/irritation	based on available data, not classified.
Serious eye damage/irritation	based on available data, non-irritating.
Respiratory or skin sensitization	based on available data, non-sensitizing.
Germ cell mutagenicity	
Carcinogenicity	based on available data, not classified.
Reproductive toxicity	based on available data, not classified.
STOT-single exposure	based on available data, not existing.
STOT-repeated exposure	based on available data, not existing.
Aspiration hazard	not relevant

12. ECOLOGICAL INFORMATION

Ecotoxicity

Fish (<i>Oncorhynchus mykiss</i>)	96h LC50: > 100 mg product/l
Invertebrate species (<i>Daphnia magna</i>)	48h EC50: > 100 mg product/l
Algae (<i>Desmodesmus subspicatus</i>)	72h EC50: > 100 mg product/l
Aquatic plant (Lemna gibba)	07d EC50: > 100 mg product/l

Fate

Degradation Biotic	Biodegradable.
Bioaccumulative potential	not persistent, not bio-accumulated.
Mobility in soil	Potential absorptiveness in the top organic soil layers and very little capacity to leach to lower layers.

13. DISPOSAL CONSIDERATIONS

Product	According to local regulations (most probably controlled incineration).
Contaminated packaging	According to local regulations

14. TRANSPORT INFORMATION

Land transport

ADR class	Not restricted	ADR item number	Not relevant
RID class	Not restricted	RID item number	Not relevant
Hazard identification no.	Not relevant	Substance identification no.	Not relevant
TREM – Card	Not relevant	UN Number	Not relevant
Proper shipping name	Not relevant	National regulations	

Sea transport

IMO/IMDG code	Not restricted	Class	Not restricted
Packing group	Not relevant	UN number	None
EMS	Not relevant	MFAG	Not relevant
Marine pollutant	No	Proper shipping name	Not relevant

Air transport

ICAO-TI/IATA-DGR		UN number	None
Class	Not restricted	Packing group	Not relevant
Proper shipping name	Not relevant		



MATERIAL SAFETY DATA SHEET

RhizoVital® 42I.

(EC) No. 1272/2008

Last review 1.10.2013

15. REGULATORY INFORMATION

Other regulatory information	Not relevant
Chemical Safety Assessment	Not relevant

16. OTHER INFORMATION

This information only concerns the above mentioned product and does not need to be valid if used with other product(s) or in any process. The information is to our best present knowledge correct and complete and is given in good faith but without warranty. It remains the user's own responsibility to make sure that the information is appropriate and complete for his special use of this product.

S1/2 Keep locked up and out of the reach of children.

S13 Keep away from food, drink and animal foodstuffs.

P101: If medical advice is needed have product container or label at hand

P405: Store locked up and keep out of the reach of children

History

Date of printing

1-Oct-13

Composed by

Helmut Junge