Certificate of Analysis

Batch Number: 4446008
Best Before Date: Sptember 2024

Planta Serve E

Batch: 1566235

Characteristics	Specification	Results
Synth. Tocopherol (from raw material)	PASS	PASS
Appearance (clear liquid)	PASS	PASS
Color Visual (colourless, almost colourless)	PASS	PASS
Odor (characteristic)	PASS	PASS
Density at 20deg-C (Ph. Eur. 2.2.5.)	1.087-1.092	1.090
Refractive Index at 20deg-C (Ph. Eur. 2.2.6.)	1.522-1.534	1.529
Colour index (Hazen) (c01-01-04)	<=50.00	6.00
Phenoxyethanol % (c01-31-01)	88.5-91.5	89.9
Ethylhexylglycerin % (c01-31-01)	8.5-11.5	10.1
Phenol, ppm (from raw material)	<=10.0	10.0
Date of Manufacture		March 16, 2021
Retest Date		February 28, 2024
Shipped Quantity		2.000 DR

Notes:

Technical Support Department

Personal Care

Plantaserve E – absence of Food Allergens

This is to declare, that our product Plantaserve E used as a cosmetic preservative does not contain substances or products causing allergies or intolerances according to Annex II of Regulation EU 1169/2011 food information to consumers according to its recipe.
This includes the following substances:

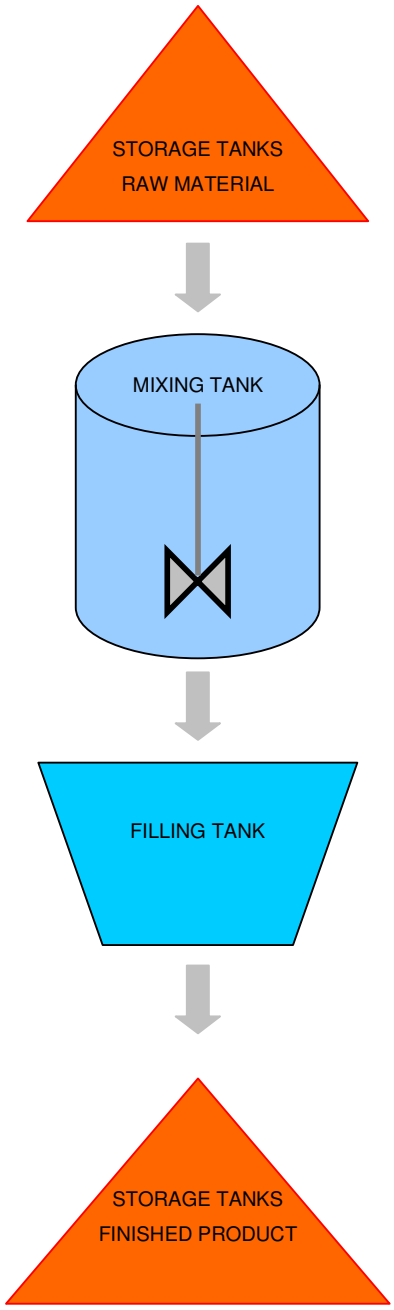
- celery
- cereals containing gluten – including wheat (such as spelt and Khorasan), rye, barley and oats
- crustaceans – such as prawns, crabs and lobsters
- eggs
- fish
- lupin
- milk
- molluscs – such as mussels and oysters
- mustard
- tree nuts – including almonds, hazelnuts, walnuts, brazil nuts, cashews, pecans, pistachios and macadamia nuts
- peanuts
- sesame seeds
- soybeans
- sulphur dioxide and sulphites (if they are at a concentration of more than ten parts per million)

Furthermore they are not added at any stage of the production of euxyl® PE 9010

Please contact us if you need further information on our products and services.

12 May 2020

Manufacturing Process Plantaserve E



Declaration for Plantaserve E– Certificate of Origin

This is to declare that!™ìúëåúçôéäôŒ is manufactured exclusively by Schülke & Mayr GmbH in Germany by using synthetic* raw materials only. No raw material of animal** or plant origin is used for the production nor does ïå comes into contact with materials of animal or plant origin during its manufacturing processes.
Thus no GMO (Genetically Modified Organisms) or BSE (Bovine Spongiform Encephalopathy) are present in the product.

Please contact us if you need further information on our products and services.

*!The compounds used to make these materials come from petroleum-based chemicals.

** The word “animal” is understand to refer to the entire Animal Kingdom, that is all vertebrates and all multi-cellular invertebrates.

7 July 2020

SAFETY DATA SHEET

Plantaserve E

Version	Revision Date:	Date of last issue: 23.02.2016
05.00	21.03.2016	Date of first issue: 04.01.2008

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

1.1 Product identifier

Trade name : Plantaserve E

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

Use of the Substance/Mixture : Preservative for cosmetics & toiletries

1.3 Details of the supplier of the safety data sheet

Supplier : Madar Corporation Limited

19 - 20 Sandleheath Industrial Estate
Fordingbridge
SP6 1PA
01425 655 555
techniical@madarcorporation.co.uk

:

:

1.4 Emergency telephone number

UK Poisons Emergency number: 0870 600 6266

Emergency telephone number :

Emergency telephone number :

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Classification (REGULATION (EC) No 1272/2008)

Serious eye damage, Category 1 H318: Causes serious eye damage.

2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms :

Signal word	:	Danger	
Hazard statements	:	H318	Causes serious eye damage.
Precautionary statements	:	P280	Wear eye protection/ face protection.
		P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
		P310	Immediately call a POISON CENTER/doctor.

Hazardous components which must be listed on the label:
70445-33-9 3-(2-ethylhexyloxy)propane-1,2-diol

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Chemical nature : solution

Hazardous components

Chemical name	Index-Number CAS-No. EC-No. Registration number	Classification	Concentration (% w/w)
2-Phenoxyethanol	603-098-00-9 122-99-6 204-589-7 01-2119488943-21-XXXX	Acute Tox. 4; H302 Eye Irrit. 2; H319	88,5 - 91,5
3-(2-ethylhexyloxy)propane-1,2-diol	603-168-00-9 70445-33-9 408-080-2 01-0000015745-65-0001	Eye Dam. 1; H318 Acute Tox. 4; H332 Aquatic Chronic 3; H412	8,5 - 11,5

For explanation of abbreviations see section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General advice	:	Take off all contaminated clothing immediately.
If inhaled	:	If symptoms persist, call a physician.
In case of skin contact	:	Wash off immediately with plenty of water.
In case of eye contact	:	In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.
If swallowed	:	Obtain medical attention.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms : Risk of serious damage to eyes.,
Risks : No information available.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment : No information available.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media . Water, Dry powder, Foam, Carbon dioxide (CO2)

Unsuitable extinguishing media : No information available.

5.2 Special hazards arising from the substance or mixture

Specific hazards during fire-fighting : No information available.

Specific risk from the substance or the product itself, its combustion products or evolved gases : Decomposition products, see chapter 10

5.3 Advice for firefighters

Further information : Standard procedure for chemical fires.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Use personal protective equipment.

6.2 Environmental precautions

Environmental precautions : Do not flush into surface water or sanitary sewer system.
Avoid subsoil penetration.

6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Wipe up with absorbent material (e.g. cloth, fleece).
Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).

6.4 Reference to other sections

see Section 8 + 13

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Advice on safe handling : Handle and open container with care.
Advice on protection against fire and explosion : No special protective measures against fire required.
Hygiene measures : Take off all contaminated clothing immediately.

19-20 Sandleheath Industrial Estate, Fordingbridge, Hampshire, SP6 1PA, UK
Tel: 01425 655555 Email: technical@madarcorporation.co.uk

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers : Store in original container.

Further information on storage conditions : Keep away from direct sunlight. Limited stability - see label on pack. Keep container tightly closed.

Advice on common storage : Keep away from food and drink.

7.3 Specific end use(s)

Specific use(s) : none

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational Exposure Limits

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
2-Phenoxyethanol	122-99-6	Permissible exposure limit	20 ppm 110 mg/m3	TRGS 900
		Ceiling Limit Value	40 ppm 220 mg/m3	TRGS 900

Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

Substance name	End Use	Exposure routes	Potential health effects	Value
2-Phenoxyethanol	Workers	Inhalation	Long-term systemic effects, Long-term local effects	8,07 mg/m3
	Workers	Skin contact	Long-term systemic effects	34,72 mg/kg
	Consumers	Inhalation	Long-term exposure, Short-term exposure, Local effects	2,5 mg/m3
	Consumers	Skin contact	Long-term local effects	20,83 mg/kg
	Consumers	Ingestion	Short-term exposure, Long-term exposure, Systemic effects	17,43 mg/kg

Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

Substance name	Environmental Compartment	Value
2-Phenoxyethanol	Fresh water	0,943 mg/l
	Marine water	0,0943 mg/l
	Fresh water sediment	7,2366 mg/kg
	Marine sediment	0,7237 mg/kg
	Soil	1,26 mg/kg
	Intermittent use/release	3,44 mg/l

	Sewage treatment plant	24,8 mg/l

8.2 Exposure controls

Personal protective equipment

Eye protection	.	Safety glasses with side-shields conforming to EN166
Hand protection	:	Impervious gloves Splash protection: disposable nitrile rubber gloves e.g. Dermatril (layer thickness: 0,11 mm) made by KCL or gloves from other manufacturers offering the same protection. Prolonged contact: Butyl rubber gloves e.g. Butoject (>480 Min., layer thickness: 0,70 mm) made by KCL or gloves from other manufacturers offering the same protection.
Skin and body protection	.	Choose body protection according to the amount and concentration of the dangerous substance at the work place.
Protective measures	:	Avoid contact with skin and eyes.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance	:	Liquid
Colour	:	nearly colourless
Odour	:	characteristic
Odour Threshold	:	not determined
pH	:	6 - 8, Concentration: 10 g/l, 20 °C
Freezing point	:	ca. 5 °C
Boiling point/boiling range	:	> 100 °C
Flash point	:	> 100 °C, ISO 2719
Evaporation rate	:	not determined
Flammability (solid, gas)	:	Not applicable
Upper explosion limit	:	Not applicable
Lower explosion limit	:	Not applicable
Vapour pressure	:	not determined
vapour density	:	not determined
Density	:	ca. 1,0871 - 1,0923 g/ml, 20 °C
Solubility(ies)		
Water solubility	:	10 g/l , 20 °C
Partition coefficient: n-octanol/water	:	Not applicable
Auto-ignition temperature	:	Not applicable
Viscosity		
Viscosity, dynamic	:	28 mPa*s, Rheo WIN RS 600
Flow time	:	< 15 s at 20 °C, DIN 53211
Explosive properties	:	Not explosive
Oxidizing properties	:	The substance or mixture is not classified as oxidizing.

9.2 Other information

Surface tension	:	34 mN/m
Refractive index	:	1,522 - 1,534 at 20 °C

SECTION 10: Stability and reactivity

10.1 Reactivity

Stable under recommended storage conditions.

10.2 Chemical stability

No decomposition if stored normally.

10.3 Possibility of hazardous reactions

None reasonably foreseeable.

10.4 Conditions to avoid

Protect from frost, heat and sunlight.

10.5 Incompatible materials

No data available,

10.6 Hazardous decomposition products

None reasonably foreseeable.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Components:

2-Phenoxyethanol:

Acute oral toxicity	:	LD50 (Rat): 1850 mg/kg, Harmful if swallowed.
Acute inhalation toxicity	:	(Rat): 8 h, An LC50/ inhalation could not be determined because no mortality of rats was observed at the maximum achievable concentration.
Acute dermal toxicity	:	LD50: > 2000 mg/kg, Based on available data, the classification criteria are not met.

3-(2-ethylhexyloxy)propane-1,2-diol:

Acute oral toxicity	:	LD50 (Rat): > 2000 mg/kg, OECD Test Guideline 401, Based on available data, the classification criteria are not met.
Acute inhalation toxicity	:	LC50 (Rat): 3,07 mg/l, OECD Test Guideline 403, Harmful if inhaled.
Acute dermal toxicity	:	LD50 (Rat): > 2000 mg/kg, OECD Test Guideline 402, Based on available data, the classification criteria are not met.

Skin corrosion/irritation

Components:

2-Phenoxyethanol:
Rabbit, OECD Test Guideline 404, No skin irritation
3-(2-ethylhexyloxy)propane-1,2-diol:
OECD Test Guideline 404, slight irritation, Based on available data, the classification criteria are not met.

Serious eye damage/eye irritation

Components:

2-Phenoxyethanol:
Rabbit, Causes serious eye irritation., OECD Test Guideline 405
3-(2-ethylhexyloxy)propane-1,2-diol:

OECD Test Guideline 405, Risk of serious damage to eyes., concentrate

Respiratory or skin sensitisation

Components:

2-Phenoxyethanol:
Did not cause sensitisation on laboratory animals.Maximisation Test, Guinea pig, OECD Test Guideline 406
3-(2-ethylhexyloxy)propane-1,2-diol:
Did not cause sensitisation on laboratory animals.OECD Test Guideline 406

Germ cell mutagenicity

Components:

2-Phenoxyethanol:
Germ cell mutagenicity- Assessment : Tests on bacterial or mammalian cell cultures did not show mutagenic effects.
3-(2-ethylhexyloxy)propane-1,2-diol:
Genotoxicity in vitro : OECD Test Guideline 471, Not mutagenic in Ames Test
Genotoxicity in vivo : OECD 474, Micronucleus test: not mutagenic

Carcinogenicity

Components:

2-Phenoxyethanol:
Carcinogenicity - Assessment : No data available

Reproductive toxicity

Components:

2-Phenoxyethanol:
Reproductive toxicity - Assessment : Animal testing did not show any effects on fertility.
3-(2-ethylhexyloxy)propane-1,2-diol:
Effects on foetal development : Rat, Oral, NOAEL: 800 mg/kg, OECD Test Guideline 414, Based on available data, the classification criteria are not met.

STOT - single exposure

Components:

2-Phenoxyethanol:
Based on available data, the classification criteria are not met.

STOT - repeated exposure

Components:

2-Phenoxyethanol:
No data available

Repeated dose toxicity

Components:

2-Phenoxyethanol:
Rat, NOAEL: 400 mg/kg, Oral, Based on available data, the classification criteria are not met.
3-(2-ethylhexyloxy)propane-1,2-diol:
Rat, NOAEL: 100 mg/kg, Oral, 28-day , OECD Test Guideline 407, Based on available data, the classification criteria are not met.

Rat, NOAEL: 50 mg/kg, Oral, 90-day

Aspiration toxicity

No data available

SECTION 12: Ecological information

12.1 Toxicity

Components:

2-Phenoxyethanol:

Toxicity to fish	:	LC50 (Leuciscus idus (Golden orfe)): > 100 mg/l, 96 h
Toxicity to daphnia and other aquatic invertebrates	:	EC50 : > 500 mg/l, 48 h
Toxicity to algae	:	EC50 (Desmodesmus subspicatus (green algae)): > 500 mg/l, 72 h
Toxicity to fish (Chronic toxicity)	:	NOEC: 23 mg/l , 34 d, Pimephales promelas (fathead minnow)
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	NOEC: 9,43 mg/l , 21 d, Daphnia magna (Water flea)

3-(2-ethylhexyloxy)propane-1,2-diol:

Toxicity to fish	:	LC50 (Brachidanio rerio): 60,2 mg/l
Toxicity to daphnia and other aquatic invertebrates	:	EC50 (Daphnia magna): 78,3 mg/l, 48 h
Toxicity to algae	:	IC50 (Desmodesmus subspicatus (green algae)): 48,3 mg/l, 72 h
Toxicity to fish (Chronic toxicity)	:	NOEC: 1,5 mg/l , 35 d, Brachidanio rerio, OECD Test Guideline 210
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)	:	NOEC: 20 mg/l , 21 d, Daphnia magna (Water flea), OECD Test Guideline 211
Toxicity to bacteria	:	EC50 : 560 mg/l , OECD 209

12.2 Persistence and degradability

Components:

2-Phenoxyethanol:

Biodegradability	:	Biodegradation: 90 - 100 %, Exposure time: 15 d, OECD Test Guideline 301A, According to the results of tests of biodegradability this product is considered as being readily biodegradable.

3-(2-ethylhexyloxy)propane-1,2-diol:

Biodegradability	:	According to OECD criteria, the product is inherently biodegradable., OECD 302B/ ISO 9888/ EEC 88/302C

12.3 Bioaccumulative potential

Components:

2-Phenoxyethanol:

Bioaccumulation	:	Bioconcentration factor (BCF): 0,35, No bioaccumulation is to be expected (log Pow <= 4).
Partition coefficient: n-octanol/water	:	log Pow: 1,16

3-(2-ethylhexyloxy)propane-1,2-diol:

Partition coefficient: n-octanol/water	:	log Pow: 2,53

19-20 Sandleheath Industrial Estate, Fordingbridge, Hampshire, SP6 1PA, UK
Tel: 01425 655555 Email: technical@madarcorporation.co.uk

12.4 Mobility in soil

Product:

Mobility : No data available

Components:

2-Phenoxyethanol:

Mobility : Mobile in soils

12.5 Results of PBT and vPvB assessment

Product:

Assessment : This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

12.6 Other adverse effects

Product:

Adsorbed organic bound halogens (AOX) : Product does not contain any organic halogens.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Product : Dispose of as hazardous waste in compliance with local and national regulations. The product should not be allowed to enter drains, water courses or the soil.

Contaminated packaging : Empty containers should be taken to an approved waste handling site for recycling or disposal.

Waste key for the unused product(Group) : The waste producer itself must, in consultation with the appropriate authorities and a waste disposal company, obtain a waste code from the EWC (European Waste Catalogue)

SECTION 14: Transport information

14.1 UN number

Not regulated as a dangerous good

14.2 UN proper shipping name

Not regulated as a dangerous good

14.3 Transport hazard class(es)

Not regulated as a dangerous good

14.4 Packing group

Not regulated as a dangerous good

14.5 Environmental hazards

Not regulated as a dangerous good

14.6 Special precautions for user

For personal protection see section 8.

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

Not applicable for product as supplied.

19-20 Sandleheath Industrial Estate, Fordingbridge, Hampshire, SP6 1PA, UK
Tel: 01425 655555 Email: technical@madarcorporation.co.uk

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006

Plantaserve E

Version	Revision Date:	Date of last issue: 23.02.2016
05.00	21.03.2016	Date of first issue: 04.01.2008

SECTION 15: Regulatory information

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

Legislation on the control of major-accident hazards involving dangerous substances : Directive 96/82/EC does not apply

Volatile organic compounds : none, Directive 2010/75/EC on the limitation of emissions of volatile organic compounds

15.2 Chemical safety assessment

Exempt

SECTION 16: Other information

Full text of H-Statements

H302	: Harmful if swallowed.
H318	: Causes serious eye damage.
H319	: Causes serious eye irritation.
H332	: Harmful if inhaled.
H412	: Harmful to aquatic life with long lasting effects.

Full text of other abbreviations

Acute Tox.	: Acute toxicity
Aquatic Chronic	: Chronic aquatic toxicity
Eye Dam.	: Serious eye damage
Eye Irrit.	: Eye irritation

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - European Agreement concerning the International Carriage of Dangerous Goods by Road; AICS - Australian Inventory of Chemical Substances; ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA - European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumu-

lative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

Further information

Changes compared with the previous edition!!!

The information provided in this Safety Data Sheet 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 guidance for safe handling, use, processing, storage, transportation, disposal and release and is not to be considered 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 materials or in any process, unless specified in the text.

19-20 Sandleheath Industrial Estate, Fordingbridge, Hampshire, SP6 1PA, UK
Tel: 01425 655555 Email: technical@madarcorporation.co.uk