

CERTIFICATE OF ANALYSIS

Product Name: Plantaserve E

Batch No: 4548510

Best Before End July 2027

Test parameter	Unit	Specification	Result
Appearance		Colourless liquid, slightly viscous	Conforms
Colour	HAZEN	< 10	<5
Phenol Content	mg/kg	< 10	<10
Ethylheylglycerin Content	%	9.5 – 10.5	10.06
2-Phenoxyethanol Content	%	89.5 – 90.5	89.94



Allergen Statement

PLANTASERVE E

We Hereby declare that, product Plantaserve E INCI name: Phenoxyethanol, ethylhexylglycerin) is free of all allergens

16/09/2021



Animal Testing Statement PLANTASERVE E

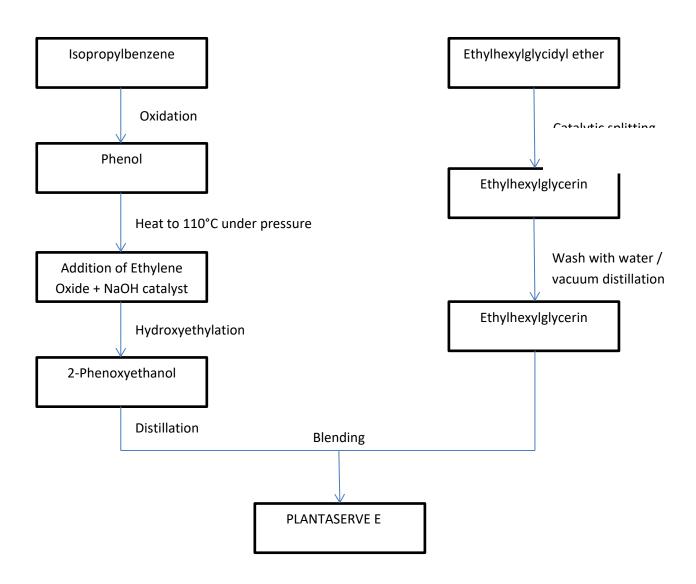
To Whom It May Concern:

To the best of our knowledge we an declare and certify that Plantaserve E (CAS No: 122-99-6) has never been tested on animals. Furthermore, no material used in the production has ever been the subject of animal testing.

15/01/2020

MYSTIC M@MENTS

PRODUCTION FLOW CHART FOR PLANTASERVE E





SAFETY DATA SHEET

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

1.1 Product identifier

Product Name: Plantaserve E
 Chemical Name: Mixture
 CAS Number: Mixture
 EC Number: Mixture

- REACH Registration Number:

- Synonyms:

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

- Use of the substance/mixture: Preservative for cosmetic and personal care products.

1.3 Details of the supplier of the safety data sheet

- Name of Supplier: Madar Corporation Limited

- Address of Supplier:

19 - 20 Sandleheath Industrial Estate

Fordingbridge SP6 1PA

- Telephone: + 44 (0) 1425 655 555

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- Email:

technical@madarcorporation.co.uk

1.4 Emergency telephone number

- Emergency Telephone: + 44 (0) 1425 655 555 (9AM-4PM)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

- CLP: Classification according to EC regulation 1272/2008 (CLP)
- Acute Tox. 4 H302 Harmful if swallowed.
- Eye Dam. 1 H318 Causes serious eye damage.
- STOT SE 3 H335: May cause respiratory irritation

2.2 Label elements

SECTION 2: Hazards identification (....)





- Signal Word: Danger

2.2.1 Hazard statements

H318 - Causes serious eye damage.

H302 - Harmful if swallowed.

May cause respiratory irritation H335

2.2.2 Precautionary statements

P261: Avoid breathing mist/vapours/spray

P270: Do not eat, drink or smoke when using this product.

P280 - Wear protective gloves/protective clothing/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.

P301+P312 - IF SWALLOWED: Call a POISON CENTRE/doctor/ if you feel unwell.

P330 - Rinse mouth.

P310: Immediately call a POISON CENTRE or doctor/physician

P501 - Dispose of contents/container to an authorised waste collection point

2.3 Other hazards

- The substances in the mixture does not meet the PBT/vPvB criteria according to REACH, annex XIII.

SECTION 3: Composition/information on ingredients

3.1 Substances

3.2 Mixtures

3.2.1 2-Phenoxyethanol

CAS Number: 122-99-6

REACH Registration Number: 01-2119488943-21-XXXX

Content (%): 90

CLP classification: Acute Tox. 4. H302, Eye Dam. 1: H318, STOT SE 3: H335

Type [1] Constituent,

SECTION 3: Composition/information on ingredients (....)

3.2.2 3-(2-ethylhexyloxy)propane-1,2-diol

CAS Number: 70445-33-9

REACH Registration Number: 01-0000015745-65-XXXX

Content (%):

CLP classification: Acute Tox. 4, H332, Eye Dam. 1: H318, Aquatic Chronic 3: H412

Type [1] Constituent

SECTION 4: First aid measures

4.1 Description of first aid measures

4.1.1 Contact with eyes

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Get medical advice/attention

4.1.2 Contact with skin

Wash immediately with soap and plenty of water

In case of skin reactions, consult a physician

4.1.3 Ingestion

IF SWALLOWED: Rinse mouth. Do NOT induce vomiting. Get medical advice/attention.

Drink plenty of water.

4.1.4 Inhalation

Move affected person to fresh air

Consult a doctor if symptoms persist.

4.2 Most important symptoms and effects, both acute and delayed

- Causes serious eye damage

4.3 Indication of any immediate medical attention and special treatment needed

- Treat symptomatically

SECTION 5: Firefighting measures

5.1 Extinguishing media

- Suitable extinguishing media: Water spray, dry powder, foam or CO2
- Unsuitable extinguishing media: Full water jet (may release chemical into the environment and spread the fire).

5.2 Special hazards arising from the substance or mixture

SECTION 5: Firefighting measures (....)

- Thermal Decomposition: May liberate carbon oxides and other toxic gases or vapours
- Do not allow firefighting water to enter drains or water courses.
- Hazardous decomposition products: See section 10.6
- In case of insufficient ventilation and/or in use, may form flammable/explosive vapour-air mixture.

5.3 Advice for firefighters

- Wear a self-contained breathing apparatus and chemical protective clothing.
- Collect contaminated fire extinguishing water separately

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

- Wear respiratory protection. Provide adequate ventilation.
- Safe handling: see section 7
- Wear personal protection equipment

6.2 Environmental precautions

- Do not allow to enter into surface water or drains
- In case of escape or of entry into waterways, soil or drains, inform the responsible authorities.

6.3 Methods and material for containment and cleaning up

- Take up mechanically, placing in appropriate containers for disposal.
- Provide adequate ventilation.

6.4 Reference to other sections

- See section 8 for information on appropriate personal protective equipment
- See section 13 for additional waste treatment information

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Avoid contact with skin, eyes and clothing. Keep container tightly sealed. Provide appropriate exhaust ventilation in places where fumes are formed. Prevent formation of aerosols. Do not eat, drink or smoke in work areas. Remove contaminated clothing and protective equipment before entering eating/clean areas.

- Keep away from heat, sparks, flame and other sources of ignition.
- No smoking
- Take action to prevent static discharges.

SECTION 7: Handling and storage (....)

- Use explosion proof electrical equipment.

7.2 Conditions for safe storage, including any incompatibilities

- Store in tightly closed containers in cold, dry and well ventilated areas designated for this purpose.
- Take precautionary measures against static discharges. Keep away from sources of ignition No smoking
- Protect against direct sunlight.
- Do not store at temperatures below: 10 °C
- Keep away from food, drink and animal feeding stuffs.
- Keep away from incompatible substances.

7.3 Specific end use(s)

- See Section 1

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

- No exposure limits known for ingredient(s).

8.1.1 DNEL/DMEL

Substance name: 2-phenoxyethanol

Chronic effects Workers Inhalation Local: 8.07 mg/m3

Inhalation Systemic: 20.83 mg/kg bw/day

Chronic effects Consumers Inhalation Local: 2.41 mg/m³ Inhalation Systemic: 2.41 mg/m³ Dermal Systemic: 10.42 mg/kg bw/day Oral Systemic: 9.23 mg/kg bw/day

Acute Effects Consumers

Oral Systemic: 9.23 mg/kg bw/day

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

Acute effects Workers

Inhalation Systemic: 1.55 mg/m3

Chronic effects Workers

Inhalation Systemic: 0.875 mg/m3 Dermal Systemic: 1 mg/kg bw/day

Chronic effects Consumers

Inhalation Systemic: 0.1085 mg/m3

SECTION 8: Exposure controls/personal protection (....)

Dermal Systemic: 0.5 mg/kg bw/day

8.1.2 PNEC

Substance name: 2-phenoxyethanol

freshwater 0.943 mg/l marine water 0.094 mg/l sewage treatment plant (STP) 24.8 mg/l freshwater, sediment 7.237 mg/kg marine water, sediment 0.724 mg/kg soil 1.26 mg/kg

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

freshwater 0.15 mg/l marine water 0.015 mg/l sewage treatment plant (STP) 5.6 mg/i freshwater, sediment 0.19 mg/kg/day marine water, sediment 0.019 mg/kg/day soil 0.894 mg/kg/day

8.2 Exposure controls

- Appropriate Engineering Controls: Ensure eye bath is available., Provide adequate ventilation.









Occupational exposure controls:

Do not breathe dusts/mists.

Avoid contact with skin, eyes and clothes.

Do not eat, drink or smoke when using this product.

Wash hands before breaks and after work. Wash contaminated clothing before reuse

- Respiratory Protection: Wear breathing apparatus if exposed to vapours/dusts/aerosols. Half-face mask: Filter type: type A EN

136/140/145/143/149

- Hand Protection: Wear chemical protective gloves, The quality of the protective gloves resistant to chemicals must be chosen as a

function of the specific working place concentration and quantity of hazardous substances., For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above

together with the supplier of these gloves

- Eye protection: Eye glasses with side protection. EN166

- Skin protection: For the protection against direct skin contact, body protective clothing is essential (in addition to the usual

working clothes). The type of protective equipment must be selected according to the concentration and amount

of the dangerous substance at the specific workplace

8.3 Environmental exposure controls

- Do not allow to enter into surface water or drains.
- In case of escape or of entry into waterways, soil or drains, inform the responsible authorities.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

- Appearance: Liquid

- Colour: Colourless / yellow

- Odour: Faint

pH: 7.5 (20 °C, 0.5 % aq)
Melting point/Range: Not determined
Boiling Point/Range: Not determined

- Solubility in water: No information available

- Relative density: 1.09

9.2 Other information

- No additional information.

SECTION 10: Stability and reactivity

10.1 Reactivity

- Risk of explosion in case of drying up; May form explosive peroxides

10.2 Chemical stability

- The product is stable under usual conditions.

10.3 Possibility of hazardous reactions

- In case of insufficient ventilation and/or in use, may form flammable/explosive vapour-air mixture.

10.4 Conditions to avoid

- Heat.
- Keep away from heat, hot surfaces, sparks, open flames and other ignition sources.
- No smoking.

10.5 Incompatible materials

- No data available

10.6 Hazardous decomposition products

- In case of fire may be liberated: Carbon dioxide (CO2), Carbon monoxide, Pyrolysis products

SECTION 11: Toxicological information

11.1 Information on toxicological effects

- Acute Toxicity: Acute Tox. 4 H302: Harmful if swallowed

2-Phenoxyethanol

SECTION 11: Toxicological information (....)

LD50: oral Rat 1840 mg/kg LD50: oral ATE 1394 mg/kg LD50: dermal Rabbit > 2214 mg/kg

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

LD50: oral Rat >2000 mg/kg LD50: dermal Rat >2000 mg/kg LC50 4h: Inhalation Rat 3.07 mg/l 11.2 Serious eye damage/irritation

Eye Dam. 1 H318: Causes serious eye damage

11.3 Skin corrosion/irritation

- Based on available data the classification criteria are not met

11.4 Ingestion

- No data available

11.5 Inhalation

- No data available

11.6 Carcinogenicity

- Based on available data the classification criteria are not met

11.7 Germ cell mutagenicity

Not classified based on available information. In vivo mutagenicity/genotoxicity no data available

11.8 Teratogenicity

- No data available

Specific target organ toxicity (single exposure) STOT SE 3 H335: May cause respiratory irritation.

Specific target organ toxicity (repeated exposure) Not classified based on available information.

Aspiration hazard Not classified based on available information.

- Information on other hazards
- Endocrine disrupting properties: No information available

SECTION 12: Ecological information

12.1 Toxicity

SECTION 12: Ecological information (....)

Acute effects Not Classified.

Chronic effects Not Classified.

Substance name: 2-phenoxyethanol

LC50: 96 h Leuciscus idus (golden orfe) > 220 - < 460 mg/L

ErC50: 48 h Algae>100 mg/L

EC50: 48 h Daphnia magna (Big water flea) >500 mg/L NOEC: 34 d Pimephales promelas (fathead minnow) 23 mg/L NOEC: 21 d Daphnia magna (Big water flea) 9.43 mg/L

NOEC: 72 h Algae 46 mg/L

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

NOEC: - Brachydanio rerio (Zebra-fish) 60.2 mg/L

NOEC: - no data available. 48.28 mg/L

12.2 Persistence and degradability

Substance name: 2-phenoxyethanol; Readily biodegradable (according to OECD criteria). 75%/28d OECD 301F. >90%/15d OECD 301A.

Substance name: 3-(2-ethylhexyloxy)propane-1,2-diol Not expected to be readily biodegradable.

12.3 Bioaccumulative potential

- No data available

12.4 Mobility in soil

- This product is moderately soluble in water.

12.5 Results of PBT and vPvB assessment

- PBT/vPvB assessment information is not available as chemical safety assessment not conducted

12.6 Other adverse effects

- Endocrine disrupting properties: No information available

- Other adverse effects: Additional ecotoxicological information: Do not allow to enter into surface water or drains

SECTION 13: Disposal considerations

13.1 Waste treatment methods

- Avoid release to the environment. Refer to special instructions/Safety data sheets
- Disposal should be in accordance with local, state or national legislation

SECTION 13: Disposal considerations (....)

Disposal must be made according to official regulations. Offer surplus and non-recyclable material to a licensed Disposal of Product: disposal company. Dissolve or mix the material with combustible solvent and burn in a chemical incinerator

equipped with an afterburner and scrubber.

- Disposal of Packaging: Contaminated packaging that cannot be cleaned should be disposed of in the same manner as the contents.
- Discharge into the environment must be avoided

SECTION 14: Transport information

14.1 UN number or ID number

- UN No.: Not classified as hazardous for transport

14.2 UN proper shipping name

- Proper Shipping Name: Not classified as hazardous for transport

14.3 Transport hazard class(es)

- Hazard Class: Not classified as hazardous for transport

14.4 Packing group

- Packing Group: Not classified as hazardous for transport

14.5 Environmental hazards

- No information available

14.6 Special precautions for user

- No special precautions are required for this product

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

Safety Data Sheet according to Regulation (EC) No. 1907/2006 (REACH)

Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances [Seveso-III-Directive] no data available.

15.2 Chemical safety assessment

- A chemical safety assessment has not been carried out.

SECTION 16: Other information

The data contained in this safety data sheet are based on our current knowledge and experience and describe the product only with regard to safety requirements. The data do not describe the product's properties (product specification). Neither should any agreed

SECTION 16: Other information (....)

property nor the suitability of the product for any specific purpose be deduced from the data contained in the safety data sheet. It is the responsibility of the recipient of the product to ensure any proprietary rights and existing laws and legislation are observed.

--- end of safety datasheet ---



Product Specification

Plantaserve E

INCI: Phenoxyethanol, ethylhexylglycerin

Plantaserve E is a blend of phenoxyethanol with ethylhexylglycerin. Although primarily a skin conditioning agent, ethylhexylglycerin increases the preservative efficacy of phenoxyethanol, thus creating milder formulations by reducing the overall required preservative dosage.

Applications

- Shampoo & shower gel (rinse-off)
- Creams & lotions (leave-on)
- O/W emulsions
- W/O emulsions
- Wet wipes
- Lip care
- Product for Children under 3

Use scenarios derived from evaluation of Cosmetic Regulation guidelines and preservative performance for typical formulations.

Formulation Guidance

pH (effective range) 3-9 Solubility (water) 0.6%

Solubility (glycols) Fully soluble

Maximum process temperature 80°C

General information Primeguard PEHG is compatible with

most personal care ingredients. In aqueous formulations, heating to 40°C may be required in order to fully

dissolve the preservative.

In use concentrations	Recommendation	EU Cosmetic Regulation (Max)
Leave-on	0.5 – 1.0%	1.11%
Rinse-off	0.5 – 1.0%	1.11%

In use concentrations vary according to the formulation type and other ingredients present. The correct use dosage should be determined by microbial challenge testing of the finished formulations.

Minimum Inhibitory Concentrations

Microorganism	MIC (%)	
Bacteria (gram-negative)		
Pseudomonas aeruginosa	0.40	
Escherichia coli	0.40	
Bacteria (gram-po	sitive)	
Staphylococcus aureus	0.40	
MRSA	0.40	

Minimum Inhibitory Concentrations

Microorganism	MIC (%)	
Yeasts		
Candida albicans	0.25	
Candida famata	0.25	
Moulds		
Aspergillus niger	0.25	

Paraben Free	Thiazolinone Free	Formaldehyde Free	Preservative Free	Natural
Yes	Yes	Yes		



Product information file

PLANTASERVE E

INCI BREAKDOWN

Chemical name	CAS number	REACH Registration No.	Composition
Phenoxyethanol	122-99-6	01-2119488943-21-XXXX	90%
Ethylhexylglycerin	70445-33-9	01-0000015745-65-XXXX	10%

ANIMAL TESTING

Plantaserve E has not been tested on animals by the Manufacturer or Prime Surfactants Ltd. No animal testing has been commissioned by any party.

PALM CONTENT/RSPO STATUS

Derived from palm/palm kernel oil \square NOT Derived from palm/palm kernel oil \boxtimes

RSPO Status: Not applicable

GMO

Plantaserve E is not derived from any material which contains genetically modified organisms (GMO)

CMRs

Plantaserve E does not contain any material classified as a "CMR "(Carcinogenic, Mutagenic, Toxic to Reproduction) according to Regulation (EC) No 1272/2008.

ORIGIN

Synthetic

COUNTRY OF ORIGIN

United Kingdom

VEGAN/VEGETARIAN

Plantaserve E does not contain any substances sourced from animal products and is therefore suitable for vegan and vegetarian applications.

06/05/2022