



Certificate of Analysis

Product Name : PHENOXYETHANOL

Batch No: 4388019

Best Before End: February 2023

Test Property	Specification	Result
Appearance	Clear, free from contamination	CONFORMS
Concentration	>99.0%	99.9
Water Content	<0.1%	0.01
Colour	<10 Hazen	4
Phenol Content	<10 ppm	<10
Ethylene oxide	<2 ppm	<2
Specific Gravity, at 20°C	1.105 – 1.110	1.108

BMT-RSPO-000397 APPLIES WHERE “MB” OR “SG” APPEARS LINKED TO THE PRODUCT NAME

The aforementioned data shall constitute the agreed contractual quality of the product at the time of passing of risk. The data are controlled at regular intervals as part of our manufacturers' quality assurance program. Neither these data nor the properties of product specimens shall imply any legally binding guarantee of certain properties or of fitness for a specific purpose. No liability of ours can be derived therefrom.

THIS REPORT HAS BEEN PRODUCED ELECTRONICALLY AND DOES NOT REQUIRE A SIGNATURE.



Allergen Statement

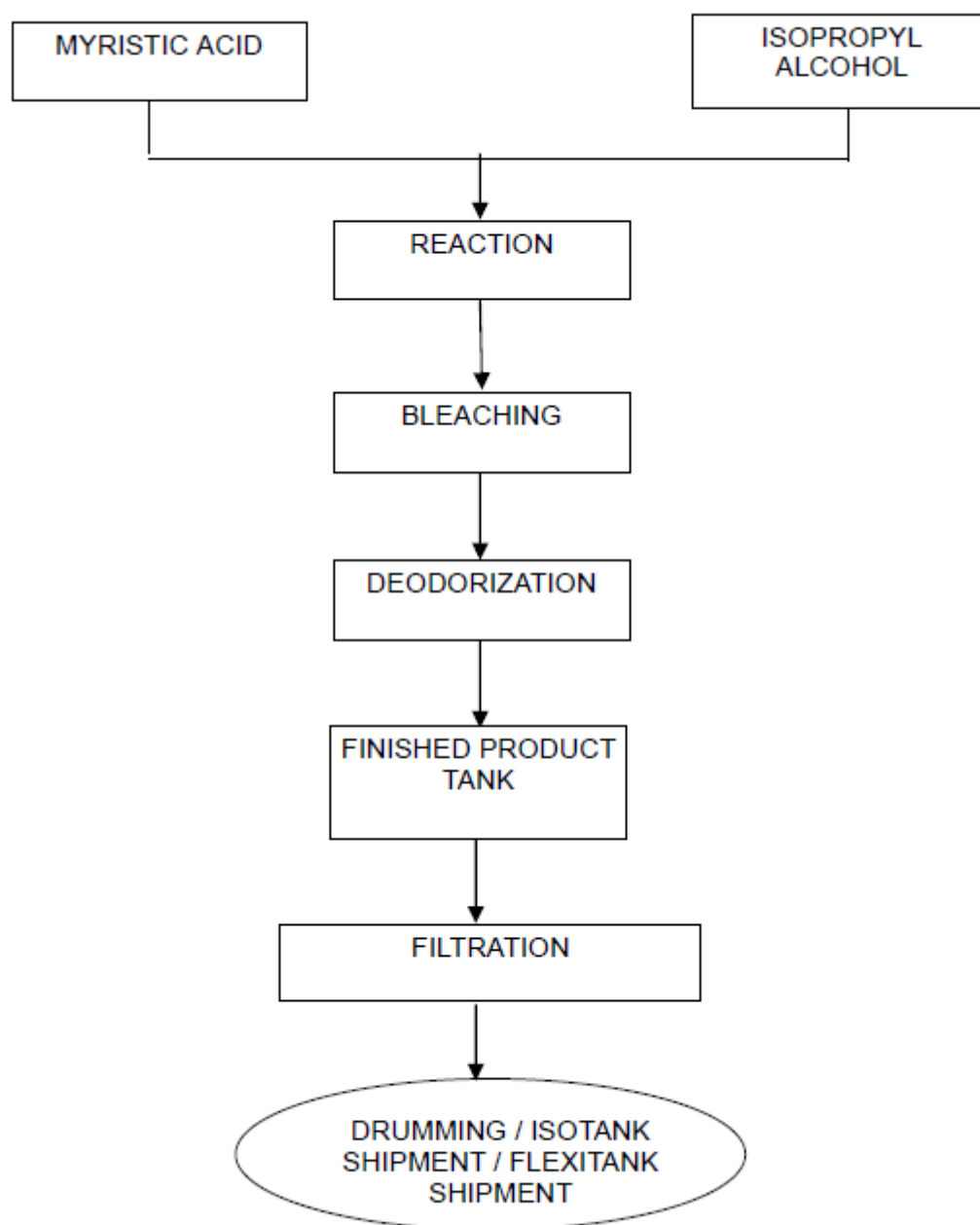
PHENOXYETHANOL

MADAR Corporation Limited certify that PHENOXYETHANOL does not contain the below 26 allergens as added component:

- | | |
|--|---|
| 1. Amyl cinnamal | 14. Anisyl alcohol |
| 2. Benzyl alcohol | 15. Benzyl cinnamate |
| 3. Cinnamyl alcohol | 16. Farnesol |
| 4. Citral | 17. 2-(4-tert-Butylbenzyl) propionald-hyd |
| 5. Eugenol | 18. Linalool |
| 6. Hydroxyl-citronellal | 19. Benzyl benzoate |
| 7. Isoeugenol | 20. Citronellol |
| 8. Amylcinnamyl alcohol | 21. Hexyl cinnam-aldehyd |
| 9. Benzyl salicylate | 22. d-Limonene |
| 10. Cinnamal | 23. Methyl heptin carbonate |
| 11. Coumarin | 24. 3-Methyl-4-(2, 6 6 tri-methyl-2- |
| cyclohexen-1-yl)-3-buten-2-one | |
| 12. Geraniol | 25. Oak moss and treemoss extract |
| 13. Hydroxy-methylpentylcyclohexenecarboxaldehyd | 26. Treemoss extract |

Process Flowchart

Phenoxyenthanol





GMO Statement

PHENOXYETHANOL

To Whom It May Concern:

This letter is to certify that PHENOXYETHANOL (INCI name: Phenoxyethanol) supplied by Madar Corporation Limited is not derived from, and does not contain any Genetically Modified Organisms (GMO). Furthermore, no GMO materials are used in the manufacturing facility where PPHENOXYETHANOL is produced..



Country of Origin statement

PHENOXYETHANOL

Prime Surfactants Limited hereby certify that PHENOXYETHANOL (CAS number 122-9-6) originates and is manufactured in the UK.



Composition and REACH Statement

PRIMEGUARD PE

To Whom It May Concern:

This is to certify that PHENOXYETHANOL (INCI name: Phenoxyethanol) is fully compliant with the REACH regulations (EC 1907/2006).

Ingredients	CAS#	REACH Registration No.
Phenoxyethanol	122-99-6	01-2119488943-21- xxxx

SAFETY DATA SHEET

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

1.1 Product identifier

- Product Name: Primeguard PE
- Chemical Name: 2-phenoxyethanol
- CAS Number: 122-99-6
- EC Number: 204-589-7
- REACH Registration Number: 01-2119488943-21-XXXX
- Synonyms: EU index: 603-098-00-9

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

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

1.3 Details of the supplier of the safety data sheet

- Name of Supplier: Prime Surfactants Ltd
- Address of Supplier: Airedale House
423 Kirkstall Road
Leeds
LS4 2EW
- Telephone: + 44 (0) 113 357 2200
- Responsible Person: Utrick Alexander
- Email: Info@primesurfactants.com

1.4 Emergency telephone number

- Emergency Telephone: + 44 (0) 113 357 2200 (9AM-5PM)

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

- CLP: Classification according to CLP (EC No. 1272/2008)
- Acute Tox. 4
- Eye Irrit. 2, H319

2.2 Label elements



GHS07

- Signal Word: Warning

2.2.1 Hazard statements

- H302 - Harmful if swallowed.
- H319 - Causes serious eye irritation.

2.2.2 Precautionary statements

SECTION 2: Hazards identification (....)

P280 - Wear protective gloves/protective clothing/eye protection/face protection.

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

P305+P351+P338 - IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P403+P233 - Store in a well-ventilated place. Keep container tightly closed.

P501 - Dispose of contents/container in accordance with national regulations.

2.3 Other hazards

- Other hazards have not been identified for this product.
-

SECTION 3: Composition/information on ingredients**3.1 Substances****3.1.1 2-Phenoxyethanol**

CAS Number: 122-99-6

EC Number: 204-589-7

Index No.: 603-098-00-9

REACH Registration Number: 01-2119488943-21-XXXX

Empirical formula $C_8H_{10}O_2$

Content (%): c.a. 100

CLP classification: Acute Tox. 4. H302, Eye Irrit. 2, H319

Synonyms: Phenoxyethanol

Type [1]

Type : [1] Constituent, [2] Impurity, [3] Stabilizing additive

3.2 Mixtures

SECTION 4: First aid measures**4.1 Description of first aid measures****4.1.1 Inhalation**

Move affected person to fresh air

If not breathing give artificial respiration

Get medical attention if any discomfort continues.

4.1.2 Ingestion

Never give anything by mouth to an unconscious person

Rinse mouth thoroughly with water.

Seek medical attention if irritation persists

SECTION 4: First aid measures (....)**4.1.3 Contact with eyes**

Flush eyes with plenty of water for at least 15 minutes. Consult a physician.

4.1.4 Contact with skin

Wash off immediately with plenty of water.

Seek immediate medical attention

4.2 Most important symptoms and effects, both acute and delayed

Corrosive to eyes.

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

5.2 Special hazards arising from the substance or mixture

- Thermal Decomposition: May liberate carbon oxides and other toxic gases or vapours.

5.3 Advice for firefighters

- Wear self contained breathing apparatus.
-

SECTION 6: Accidental release measures**6.1 Personal precautions, protective equipment and emergency procedures**

- Avoid contact with skin, eyes and clothing.
- Wear protective clothing as per section 8

6.2 Environmental precautions

- Collect and dispose of spillage as indicated in Section 13
- Do not let the product enter drains.
- Do not allow to enter into soil/subsoil.

6.3 Methods and material for containment and cleaning up

Extinguish all ignition sources. Avoid sparks, flames, heat and smoking. Ventilate. Dam and absorb spillages with sand, earth or other non-combustible material. Collect spillage in containers, seal securely and deliver for disposal according to local regulations. Wash thoroughly after dealing with a spillage.

6.4 Reference to other sections

- See section 8 for information on appropriate personal protective equipment
-

SECTION 6: Accidental release measures (....)

- See section 13 for additional waste treatment information
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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. Eliminate all sources of ignition.

7.2 Conditions for safe storage, including any incompatibilities

Store in sealed containers in a cool, dry, well-ventilated area. Storage temperature > - 10°C. Protect from freezing and direct sunlight. Keep away from heat, sparks and open flame.

7.3 Specific end use(s)

- See Section 1.2
-

SECTION 8: Exposure controls/personal protection**8.1 Control parameters**

- No exposure limits known.

8.2 Exposure controls**Gloves****Goggles****Boots**

Occupational exposure controls:

Provide appropriate exhaust ventilation at machinery and at places where fumes can be generated.

Protective and hygiene measures:

Do not breathe vapour. When using, do not eat, drink or smoke.

Remove and wash contaminated clothing before re-use.

Wash hands before breaks and immediately after handling the product. Avoid contact with skin, eyes and clothing.

Personal protective equipment

Eye/face protection:

Use safety glasses with side shields (frame goggles) tested and approved under appropriate government standards such as EN166 (EU) or NIOSH (US).

Skin protection:

Handle with gloves. Suitable chemical resistant gloves should be used. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Body protection:

Wear appropriate protective clothing to prevent skin exposure.

Respiratory protection:

Suitable face mask must be worn if exposed to vapour or aerosol.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

- Appearance: Liquid
- Colour: Colourless
- Odour: Mild aromatic
- Odour Threshold: Not relevant for safety
- pH: c.a. 6 (10 g/l)
- Melting point/Range: / freezing point: - 2°C
- Boiling Point/Range: 244.3°C at 1013 hPa
- Flashpoint: 126°C
- Auto-Ignition Temperature: 475°C at 999 hPa
- Decomposition Temperature: > 350°C
- Vapour pressure at 20°C: 0.01 mm Hg
- Density: c.a. 1.11 at 20°C
- Solubility in water: Miscible, approx. 24 g/l (20°C)
- Viscosity: 20 - 40 cps (20°C)
- Partition Coefficient (n-Octanol/Water): Not available
- Explosion Limits (Upper/Lower): Not available

9.2 Other information

- No further relevant information available.
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SECTION 10: Stability and reactivity

10.1 Reactivity

- No decomposition if used and stored according to specifications
- No specific reactivity hazards associated with this product.

10.2 Chemical stability

- The product is stable under usual conditions.

10.3 Possibility of hazardous reactions

- No potentially hazardous reactions known

10.4 Conditions to avoid

Avoid exposures to or contact with extreme temperatures, direct sunlight, incompatible materials and sources of ignition. Avoid frost.

10.5 Incompatible materials

- Strong acids
- Strong alkalis
- Strong oxidising agents

10.6 Hazardous decomposition products

SECTION 10: Stability and reactivity (....)

- Thermal decomposition or combustion may liberate carbon oxides and other toxic gases or vapours.
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SECTION 11: Toxicological information**11.1 Information on toxicological effects**

2-phenoxyethanol

LD50 Oral (Rat): 1840 mg/kg

LD50 Dermal (Rabbit): >2214 mg/kg

LC50 Inhalation (Rat): 1000 mg/l

Skin corrosion/irritation:

Liquid may irritate skin. Not a skin sensitiser. Irritating to eyes.

Respiratory or skin sensitisation:

No sensitising effects known.

Germ cell mutagenicity:

Mutagenicity: AMES TEST - Negative

Carcinogenicity:

Carcinogenicity: Not classified

Mutagenicity: Not classified [OECD 471]

Teratogenicity: Not classified

Reproductive toxicity:

Reproductive Toxicity - Fertility

Fertility: NOAEL 375 mg/kg Oral Mouse

Reproductive Toxicity - Development

Developmental toxicity: NOAEL 1000 mg/kg Oral Rat

Developmental toxicity: NOAEL 600 mg/kg Dermal rabbit

Specific target organ toxicity - single exposure:

No data available

Specific target organ toxicity - repeated exposure:

No data available

Aspiration hazard:

Vapour may irritate respiratory system or lungs.

Other information:

Eye effect: Irritating to eyes.

SECTION 12: Ecological information**12.1 Toxicity**

LC50 Pimephales promelas (96 h): 344 mg/l (Fat-head Minnow)

EC50 Daphnia (48 h): 488 mg/l (Daphnia magna)

EC50 Algae (72 h): 443 mg/l (Desmodesmus subspicatus)

EC10/LC10 Algae (72 h): 159 mg/l (Desmodesmus subspicatus)

12.2 Persistence and degradability

The product is easily biodegradable. >90% after 15 days (DOC removal) OECD Test Guideline 301A.

SECTION 12: Ecological information (....)**12.3 Bioaccumulative potential**

The product does not contain any substances expected to be bioaccumulating. BCF value: 0.35

Partition coefficient: log Kow 1.2 at 23°C

12.4 Mobility in soil

- The product is soluble in water

12.5 Results of PBT and vPvB assessment

- This substance does not meet the PBT and vPvB criteria of REACH, annex XIII

12.6 Other adverse effects

- No data available
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SECTION 13: Disposal considerations**13.1 Waste treatment methods**

Product disposal:

Disposal must be made according to official regulations. Do not allow the product to enter sewage system.

Packaging:

Contaminated packaging that cannot be cleaned should be disposed of in the same manner as the contents.

Other information:

Do not let the product enter drains.

SECTION 14: Transport information**14.1 UN number**

- UN No.: None

14.2 Proper Shipping Name

- Proper Shipping Name: Not classified as dangerous for transport.

14.3 Transport hazard class(es)

- Hazard Class: None

14.4 Packing group

- Packing Group: None

14.5 Environmental hazards

- No information available

14.6 Special precautions for user

- Not applicable

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

- Not applicable
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SECTION 15: Regulatory information

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

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

National regulatory information:

Employment restrictions:

Observe employment restrictions for young people. Observe employment restrictions for child bearing mothers and nursing.

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 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

PHENOXYETHANOL

INCI: Phenoxyethanol

Paraben Free ☒

Thiazolinone Free ☒

Formaldehyde Free ☒

Phenoxyethanol is a versatile, widely used preservative for personal care formulations. Primeguard PE has a broad, balanced spectrum of activity against bacteria, yeasts, mould and fungi.

Technical Specification (reported on the COA)

Property	Specification
Appearance	Clear, free from contamination
Concentration	>99.0%
Water Content	<0.1%
Colour	<10 APHA
Phenol Content	<10 ppm
Ethylene Oxide	<2 ppm
Specific Gravity at 20°C	1.105 – 1.110

Storage, Packing and Handling

Shelf life is 3 years from the date of manufacture in original unopened containers
Store above 10C and protect from freezing and direct sunlight

Recommended Usage

In Use Concentrations	Recommended Use Level	EU regulations (max)
Leave-On	0.4 – 1.0%	1.0%
Rinse-Off	0.4 – 1.0%	1.0%

Shampoo, Shower gel (Rinse-off)	Creams, lotions (Leave-on)	O/W emulsion	W/O emulsion	Wet wipes	Eye care	Lip Care	Oral care	Children under 3
<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>

Formulatory Guidelines

pH (effective range)	3.0 – 9.0
Solubility (Water)	2.4 %
Solubility (Glycols)	Soluble
Maximum Process Temperature	80 °C
General information	Primeguard PE is compatible with most personal care ingredients. In aqueous formulations, heating to 40°C may be required in order to fully dissolve the preservative.

Minimum Inhibitory Concentrations

Microorganism	MIC (%)
<u>Bacteria (gram-negative)</u>	
Pseudomonas aeruginosa	0.4
Escherichia coli	0.4
<u>Bacteria (gram-positive)</u>	
Staphylococcus Aureus	0.5
MRSA	0.5
<u>Yeasts</u>	
Candida Albicans	0.5
Candida Famata	0.5
<u>Moulds</u>	
Aspergillus Niger	0.5

Suggestion for the use of the application of the products and guide formulations are given just as information and without commitment. Such suggestions do not release MADAR Corporation customers from testing the products for their intended processes and purposes. We do not assume any liability or risk involved in the use of its products as the conditions of use are beyond its control. The use of the products is solely responsible for compliance with all laws and regulations applying to the use of the products, including patents of third parties.



Vegan Statement

PHENOXYETHANOL

To Whom It May Concern:

This is to certify that PHENOXYETHANOL (INCI name: Phenoxyethanol) is made solely from synthetic chemicals. No material of animal origin is used in the manufacture of PHENOXYETHANOL, and the product is manufactured in a facility that is free from animal products and derivatives. PHENOXYETHANOL is therefore suitable for use in products intended for vegans.