SECTION 1. IDENTIFICATION

Identification of the company: Clariant Corporation
4000 Monroe Road
Charlotte, NC, 28205
Telephone No.: +1 704 331 7000

Information of the substance/preparation:
BU Industrial & Consumer Specialties
Product Stewardship, +1-704-331-7710

Emergency tel. number: +1 800-424-9300 CHEMTREC

Trade name: PHENONIP
Material number: 171090
Synonyms: Product Has No Synonyms
Primary product use: Personal Care Preservatives
Chemical family: mixture of biocidal substances

SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accordance with the OSHA Hazard Communication Standard (29 CFR 1910.1200)
Acute toxicity (Oral): Category 4

GHS label elements
Hazard pictograms:

Signal word: Warning
Hazard statements: H302 Harmful if swallowed.
Precautionary statements: P101 If medical advice is needed, have product container or label at hand.
P102 Keep out of reach of children.
P103 Read label before use.

Prevention:
P264 Wash skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.

Response:
P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.

Disposal:
P501 Dispose of contents/ container to an approved waste disposal plant.

Other hazards
None known.

SECTION 3. COMPOSITION/INFORMATION ON INGREDIENTS

Substance / Mixture : Mixture

Components

<table>
<thead>
<tr>
<th>Chemical name</th>
<th>CAS-No.</th>
<th>Concentration (% w/w)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2-Phenoxyethanol</td>
<td>122-99-6</td>
<td>70 - 90</td>
</tr>
<tr>
<td>Butyl 4-hydroxybenzoate</td>
<td>94-26-8</td>
<td>1 - 5</td>
</tr>
<tr>
<td>Isobutyl 4-hydroxybenzoate</td>
<td>4247-02-3</td>
<td>1 - 5</td>
</tr>
</tbody>
</table>

Actual concentration is withheld as a trade secret

SECTION 4. FIRST AID MEASURES

General advice : If symptoms persist, call a physician.

If inhaled : Move the victim to fresh air. Give oxygen or artificial respiration if needed. Get immediate medical advice/ attention. Never give anything by mouth to an unconscious person.

In case of skin contact : Wash thoroughly with soap and water for 15 minutes. If skin irritation occurs, seek medical attention.

In case of eye contact : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention immediately if irritation develops and persists.

If swallowed : If conscious, give the patient 1-2 glasses of water (8-16 oz.) and call a doctor. Never give anything by mouth to an unconscious person. Induce vomiting only at the instructions of a doctor or nurse.

Most important symptoms and effects, both acute and delayed : The possible symptoms known are those derived from the labelling (see section 2). No additional symptoms are known.

Notes to physician : Treat symptomatically.

SECTION 5. FIREFIGHTING MEASURES
Suitable extinguishing media: Water spray jet
Alcohol-resistant foam
Carbon dioxide (CO2)
Dry powder

Unsuitable extinguishing media: High volume water jet

Specific hazards during firefighting: In case of fires, hazardous combustion gases are formed:
Carbon monoxide (CO)
Carbon dioxide (CO2)
Emits toxic and corrosive fumes under fire conditions.

Further information: Wear full protective clothing and NIOSH/MSHA-approved positive pressure, self-contained breathing apparatus.

Special protective equipment for firefighters: Self-contained breathing apparatus
Full protective suit

SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures: Wear suitable protective clothing.
Ensure adequate ventilation.
Avoid contact with skin and eyes.
Wear proper protective equipment. Contain spill. Spills should be collected as a liquid or absorbed on suitable absorbant and placed in proper containers for disposal. Do not discharge into storm drains or the aquatic environment.

Environmental precautions: The product should not be allowed to enter drains, water courses or the soil.
If the product contaminates rivers and lakes or drains inform respective authorities.

Methods and materials for containment and cleaning up: Soak up with inert absorbent material (e.g. sand, silica gel, acid binder, universal binder, sawdust).
Keep in suitable, closed containers for disposal.

SECTION 7. HANDLING AND STORAGE

Advice on protection against fire and explosion: Keep away sources of ignition.
Keep away from heat.

Advice on safe handling: Store in a closed container.
Avoid contact with skin and eyes.
Do not breathe vapours.
Store above 32 F and below 104 F.
Conditions for safe storage: Keep container tightly closed in a cool, well-ventilated place. Protect from moisture. Keep only in the original container.

Further information on storage conditions: Store in original container. Keep container closed.

Materials to avoid: Keep away from oxidizing agents.

Storage period: 36 Months

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters: Contains no substances with occupational exposure limit values.

Engineering measures: A system of local and/or general exhaust is recommended where employee exposures are at or above Occupational Exposure Limits (OEL).

Personal protective equipment:
Respiratory protection: General and local exhaust ventilation is recommended to maintain vapor exposures below recommended limits. Where concentrations are above recommended limits or are unknown, appropriate respiratory protection should be worn. Follow OSHA respirator regulations (29 CFR 1910.134) and use NIOSH/MSHA approved respirators. Protection provided by air purifying respirators against exposure to any hazardous chemical is limited. Use a positive pressure air supplied respirator if there is any potential for uncontrolled release, exposure levels are unknown, or any other circumstance where air purifying respirators may not provide adequate protection.

Hand protection: Butyl Rubber, PVC or Neoprene

Remarks: Butyl Rubber, PVC or Neoprene

Eye protection: Safety glasses with side-shields

Skin and body protection: Wear protective clothing, including long sleeves and gloves, to prevent skin contact.

Protective measures: Avoid contact with skin and eyes. Do not inhale vapours

Hygiene measures: Use only in well-ventilated areas. Remove/ Take off immediately all contaminated clothing.

SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES

Appearance: Liquid
Colour : yellow

Odour : weak

Odour Threshold : not tested.

pH : substance/mixture is non-soluble (in water)

Decomposition temperature : > 212 °F / > 100 °C

Boiling point : not determined

Flash point : 248 °F / 120 °C
  Data relate to solvent

Evaporation rate : not tested.

Flammability (solid, gas) : Not applicable

Self-ignition : Not applicable

Burning number : Not applicable

Upper explosion limit / upper flammability limit : Not applicable

Lower explosion limit / Lower flammability limit : Not applicable

Vapour pressure : not tested.

Relative vapour density : not tested.

Density : approx. 1.12 g/cm³ (68 °F / 20 °C)

Bulk density : Not applicable

Solubility(ies)
  Water solubility : slightly soluble (68 °F / 20 °C)

  Solubility in other solvents : not tested.
    Solvent: fat

Partition coefficient: n-octanol/water : Not applicable

Auto-ignition temperature : not available
Decomposition temperature: 531 °F / 277 °C
   Heating rate: 3 K/min
   No decomposition if used as directed.

Viscosity
   Viscosity, dynamic: not tested.
   Viscosity, kinematic: not tested.

Explosive properties: Not explosive

Oxidizing properties: not oxidizing

Minimum ignition energy: Not applicable

Particle size: Not applicable

SECTION 10. STABILITY AND REACTIVITY

Reactivity: No dangerous reaction known under conditions of normal use.

Chemical stability: Stable

Possibility of hazardous reactions:
   Reactions with oxidising agents.
   Stable

Conditions to avoid:
   Keep away from oxidizing agents.
   Keep away from strong bases.
   Keep away from strong acids.

Incompatible materials: not known

Hazardous decomposition products:
   When used and handled as intended, none.

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure

Ingestion

Inhalation

Acute toxicity

Product:
   Acute oral toxicity: LD50 (Rat): 1,736 mg/kg
   Method: internal test

   Acute inhalation toxicity: Remarks: no data available

   Acute dermal toxicity: LD50 (Rat): > 5,000 mg/kg
Components:

2-Phenoxyethanol:
- **Acute oral toxicity**: LD50 (Rat, male and female): 1,840 - 4,070 mg/kg
  Method: OECD Test Guideline 401
  GLP: no
- **Acute inhalation toxicity**: LC50 (Rat, male and female): > 1000 mg/m³
  Exposure time: 14 d
  Test atmosphere: dust/mist
  Method: OECD Test Guideline 412
  GLP: yes
- **Acute dermal toxicity**: LD50 (Rabbit, male and female): > 2,214 mg/kg
  Method: Other
  GLP: no
  Assessment: The substance or mixture has no acute dermal toxicity

Butyl 4-hydroxybenzoate:
- **Acute oral toxicity**: LD50 (Rat, female): > 2,000 mg/kg
  Method: OECD Test Guideline 423
  GLP: yes
  Assessment: The substance or mixture has no acute oral toxicity
- **Acute inhalation toxicity**: Remarks: no data available
- **Acute dermal toxicity**: Remarks: no data available

Isobutyl 4-hydroxybenzoate:
- **Acute oral toxicity**: LD50 (Rat, female): > 2,000 mg/kg
  Method: OECD Test Guideline 423
  GLP: yes
  Assessment: The substance or mixture has no acute oral toxicity
- **Acute inhalation toxicity**: Remarks: no data available
- **Acute dermal toxicity**: Remarks: no data available

Skin corrosion/irritation

**Product**: Method: OECD Test Guideline 404
Result: No skin irritation

Components:

2-Phenoxyethanol:
Species: Rabbit
Exposure time: 4 h
Method: OECD Test Guideline 404
Result: No skin irritation
GLP: no

**Butyl 4-hydroxybenzoate:**
Species: reconstructed human epidermis (RhE)
Exposure time: 15 min
Method: OECD Test Guideline 439
Result: Irritating to skin.
GLP: yes

**Isobutyl 4-hydroxybenzoate:**
Species: In Vitro Membrane Barrier Test Method for Skin Corrosion - CORROSITEX
Exposure time: 1 h
Method: OECD Test Guideline 435
Result: No skin irritation
GLP: yes
Species: EPISKIN Human Skin Model Test
Exposure time: 15 min
Method: OECD Test Guideline 439
Result: Irritating to skin.
GLP: yes

**Serious eye damage/eye irritation**

**Product:**
Species: Rabbit
Result: No eye irritation
Method: OECD Test Guideline 405

**Components:**

**2-Phenoxyethanol:**
Species: Rabbit
Result: Irritating to eyes.
Exposure time: 15 d
Method: OECD Test Guideline 405
GLP: no

**Butyl 4-hydroxybenzoate:**
Species: Bovine cornea
Result: Risk of serious damage to eyes.
Exposure time: 4 h
Method: OECD Test Guideline 437
GLP: yes

**Isobutyl 4-hydroxybenzoate:**
Species: Bovine cornea
Result: Risk of serious damage to eyes.
Exposure time: 4 h
Method: OECD Test Guideline 437
GLP: yes

Respiratory or skin sensitisation

Product: Remarks: no data available

Components:

2-Phenoxyethanol:
Test Type: Maximisation Test
Exposure routes: Skin contact
Species: Guinea pig
Method: OECD Test Guideline 406
Result: Not a skin sensitizer.
GLP: yes
Assessment: Harmful if swallowed.

Butyl 4-hydroxybenzoate:
Test Type: Local lymph node assay (LLNA)
Exposure routes: Dermal
Species: Mouse
Method: OECD Test Guideline 429
Result: Not a skin sensitizer.
GLP: yes
Assessment: Causes skin irritation., Causes serious eye damage.

Isobutyl 4-hydroxybenzoate:
Test Type: Local lymph node assay (LLNA)
Exposure routes: Dermal
Species: Mouse
Method: OECD Test Guideline 429
Result: Not a skin sensitizer.
GLP: yes

Germ cell mutagenicity

Product: Germ cell mutagenicity - Assessment: No information available.

Components:

2-Phenoxyethanol:
Genotoxicity in vitro : Test Type: Ames test
Test system: Salmonella typhimurium
Concentration: 20 - 5000 µg/plate
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 471
Result: negative
GLP: yes

Test Type: Chromosome aberration test in vitro
Test system: Chinese hamster lung cells
Concentration: 43.8 - 1400 µg/ml
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 473
Result: negative
GLP: yes

Test Type: HGPRT assay
Test system: Chinese hamster lung cells
Concentration: 43.8 - 1400 µg/ml
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 476
Result: negative
GLP: yes

Genotoxicity in vivo
Species: Mouse (male)
Strain: NMRI
Cell type: Bone marrow
Application Route: Intraperitoneal injection
Exposure time: 24 - 48 h
Dose: 1x 125-250-500 mg/kg
Method: OECD Test Guideline 474
Result: negative
GLP: yes

Germ cell mutagenicity - Assessment:
In vitro tests did not show mutagenic effects, In vivo tests did not show mutagenic effects

Butyl 4-hydroxybenzoate:
Genotoxicity in vitro
Test Type: Ames test
Test system: Salmonella typhimurium
Metabolic activation: with and without metabolic activation
Method: OECD Test Guideline 471
Result: negative
GLP: yes

Germ cell mutagenicity - Assessment
In vitro tests did not show mutagenic effects

Isobutyl 4-hydroxybenzoate:
Genotoxicity in vitro
Test Type: Chromosome aberration test in vitro
Test system: Chinese hamster fibroblasts
Method: Other
Result: negative
GLP: no

Test Type: Ames test
Test system: Salmonella typhimurium
Method: Other
Result: negative
GLP: no

Germ cell mutagenicity - Assessment: In vitro tests did not show mutagenic effects

Carcinogenicity

Product:
Carcinogenicity - Assessment: No information available.

Components:

2-Phenoxyethanol:
Carcinogenicity - Assessment: No information available.

Butyl 4-hydroxybenzoate:
Carcinogenicity - Assessment: No information available.

Isobutyl 4-hydroxybenzoate:
Carcinogenicity - Assessment: No information available.

IARC
No component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

OSHA
No component of this product present at levels greater than or equal to 0.1% is on OSHA’s list of regulated carcinogens.

NTP
No component of this product present at levels greater than or equal to 0.1% is identified as a known or anticipated carcinogen by NTP.

Reproductive toxicity

Product:
Reproductive toxicity - Assessment: No information available.
Components:

2-Phenoxyethanol:
Effects on fertility: Test Type: Two-generation study
Species: Mouse, male and female
Strain: CD1
Application Route: oral (feed)
Dose: 0.25 - 1.25 - 2.5 % in diet
General Toxicity - Parent: NOAEL: 1.875 mg/kg body weight
General Toxicity F1: NOAEL: 375 mg/kg body weight
General Toxicity F2: NOAEL: 375 mg/kg body weight
Method: Other
GLP: yes

Reproductive toxicity - Assessment: No evidence of adverse effects on sexual function and fertility, or on development, based on animal experiments.

Butyl 4-hydroxybenzoate:
Reproductive toxicity - Assessment: No information available.

Isobutyl 4-hydroxybenzoate:
Reproductive toxicity - Assessment: No information available.

STOT - single exposure

Product:
Remarks: no data available

Components:

2-Phenoxyethanol:
Assessment: The substance or mixture is not classified as specific target organ toxicant, single exposure.

Butyl 4-hydroxybenzoate:
Assessment: The substance or mixture is not classified as specific target organ toxicant, single exposure.

Isobutyl 4-hydroxybenzoate:
Assessment: The substance or mixture is not classified as specific target organ toxicant, single exposure.

STOT - repeated exposure

Product:
Remarks: no data available
Components:

2-Phenoxyethanol:
Assessment: The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Butyl 4-hydroxybenzoate:
Assessment: The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Isobutyl 4-hydroxybenzoate:
Assessment: The substance or mixture is not classified as specific target organ toxicant, repeated exposure.

Repeated dose toxicity

Product:
Remarks: no data available

Components:

2-Phenoxyethanol:
Species: Rat, male and female
NOAEL: 369 mg/kg
Application Route: oral (gavage)
Exposure time: 13 w
Number of exposures: daily
Dose: 1250-2500-5000-10000-20000mg/l
Group: yes
Method: OECD Test Guideline 408
GLP: yes

Species: Rat, male and female
NOAEL: 0.0482 mg/l
LOAEL: 0.246 mg/l
Application Route: Inhalation
Exposure time: 14 d
Number of exposures: 6 h/d, 5 days/w
Dose: 40 - 200 - 1000 mg/m3
Group: yes
Method: OECD Test Guideline 412
GLP: yes

Species: Rabbit, male and female
NOAEL: 500 mg/kg
Application Route: Skin contact
Exposure time: 13 w
Number of exposures: 6 h/d, 5 days/w
Dose: 50 - 150 - 500 mg/kg
Group: yes
Method: OECD Test Guideline 411
Repeated dose toxicity - Assessment : Harmful if swallowed.

Butyl 4-hydroxybenzoate:
Remarks: no data available

Repeated dose toxicity - Assessment : Causes skin irritation., Causes serious eye damage.

Isobutyl 4-hydroxybenzoate:
Remarks: no data available

Aspiration toxicity

Product:
no data available

Components:
2-Phenoxyethanol:
No aspiration toxicity classification

Butyl 4-hydroxybenzoate:
no data available

Isobutyl 4-hydroxybenzoate:
No aspiration toxicity classification

Experience with human exposure

Product:
General Information : The possible symptoms known are those derived from the labelling (see section 2).

Further information

Product:
Remarks: Inhalation of high vapour concentrations may cause symptoms like headache, dizziness, tiredness, nausea and vomiting.

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity

Product:
Toxicity to fish : LC50 (Fish): > 100 mg/l
Exposure time: 96 h
Method: calculated

Toxicity to daphnia and other aquatic invertebrates:
Remarks: no data available

Toxicity to algae/aquatic plants:
Remarks: no data available

Toxicity to microorganisms:
Remarks: no data available

Components:
2-Phenoxyethanol:

Toxicity to fish:
LC50 (Pimephales promelas (fathead minnow)): 344 mg/l
End point: mortality
Exposure time: 96 h
Test Type: flow-through test
Analytical monitoring: yes
Method: Other
GLP: no data available

Toxicity to daphnia and other aquatic invertebrates:
EC50 (Daphnia magna (Water flea)): > 500 mg/l
End point: Immobilization
Exposure time: 48 h
Test Type: static test
Analytical monitoring: no
Method: OECD Test Guideline 202
GLP: no
Remarks: The details of the toxic effect relate to the nominal concentration.

Toxicity to algae/aquatic plants:
ErC50 (Desmodesmus subspicatus (green algae)): 625 mg/l
End point: Growth rate
Exposure time: 72 h
Test Type: static test
Analytical monitoring: yes
GLP: yes
Remarks: The details of the toxic effect relate to the nominal concentration.

Toxicity to fish (Chronic toxicity):
NOEC (Pimephales promelas (fathead minnow)): 24 mg/l
End point: mortality
Exposure time: 34 d
Test Type: flow-through test
Analytical monitoring: yes
Method: OECD Test Guideline 210
GLP: yes

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity):
NOEC (Daphnia magna (Water flea)): 9.43 mg/l
End point: Reproduction rate
Exposure time: 21 d
Substance key: 000000056051  Revision Date: 12/04/2020
Version : 8 - 4 / USA  Date of printing :04/15/2021

Test Type: semi-static test
Analytical monitoring: yes
Method: OECD Test Guideline 211
GLP: yes

Toxicity to microorganisms : EC50 (activated sludge): > 1,000 mg/l
End point: Bacteria toxicity (respiration inhibition)
Exposure time: 0.5 h
Test Type: aquatic
Analytical monitoring: no
Method: OECD Test Guideline 209
GLP: yes
Remarks: The details of the toxic effect relate to the nominal concentration.

Test Type: artificial soil
LC50 (Eisenia fetida (earthworms)): > 1,000 mg/kg
Exposure time: 14 d
End point: mortality
Method: OECD Test Guideline 207
GLP: yes
Remarks: The details of the toxic effect relate to the nominal concentration.

Plant toxicity : EC50: 107 mg/kg
Exposure time: 19 d
Analytical monitoring: no
Method: OECD Guide-line 208
GLP: yes

EC50: 37 mg/kg
Exposure time: 19 d
Species: Brassica napus
Analytical monitoring: no
Method: OECD Guide-line 208
GLP: yes

EC50: 235 mg/kg
Exposure time: 19 d
Species: Brassica napus
Analytical monitoring: no
Method: OECD Guide-line 208
GLP: yes

Sediment toxicity : Remarks: Not applicable

Toxicity to terrestrial organisms : Remarks: Not applicable

Butyl 4-hydroxybenzoate:
Toxicity to fish : Remarks: no data available
Toxicity to daphnia and other : EC50 (Daphnia magna (Water flea)): 9.2 mg/l
aquatic invertebrates
End point: Immobilization
Exposure time: 48 h
Test Type: static test
Analytical monitoring: yes
Method: OECD Test Guideline 202
GLP: no

Toxicity to algae/aquatic plants

Toxicity to algae/aquatic plants:
End point: Growth rate
Exposure time: 96 h
Test Type: static test
Analytical monitoring: no
Method: OECD Test Guideline 201
GLP: no

NOEC (Pseudokirchneriella subcapitata (green algae)): 0.8 mg/l
End point: Growth rate
Exposure time: 96 h
Test Type: static test
Analytical monitoring: no
Method: OECD Test Guideline 201
GLP: no

Toxicity to fish (Chronic toxicity)
Remarks: no data available

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity)
Remarks: no data available

Ecotoxicology Assessment
Chronic aquatic toxicity: Harmful to aquatic life with long lasting effects.

Isobutyl 4-hydroxybenzoate:

Toxicity to fish
Remarks: no data available

Toxicity to daphnia and other aquatic invertebrates
EC50 (Daphnia magna (Water flea)): 5.31 mg/l
End point: Immobilization
Exposure time: 48 h
Test Type: static test
Analytical monitoring: yes
Method: OECD Test Guideline 202
GLP: yes

Toxicity to algae/aquatic plants
ErC50 (Desmodesmus subspicatus (green algae)): 8.46 mg/l
End point: Growth rate
Exposure time: 72 h
Test Type: static test
Analytical monitoring: yes
Method: OECD Test Guideline 201
GLP: yes

ErC10 (Desmodesmus subspicatus (green algae)): 4.07 mg/l
End point: Growth rate
Exposure time: 72 h
Test Type: static test
Analytical monitoring: yes
Method: OECD Test Guideline 201
GLP: yes

Toxicity to fish (Chronic toxicity) : Remarks: no data available

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity) : Remarks: no data available

Persistence and degradability

Product:
Biodegradability : Biodegradation: 90 - 100 %
Method: OECD Test Guideline 301A
Remarks: The data refer to the solvent

Components:

2-Phenoxyethanol:
Biodegradability : aerobic
Inoculum: activated sludge
Concentration: 30 mg/l
Biochemical Oxygen Demand (BOD)
Result: Readily biodegradable.
Biodegradation: 90 %
Exposure time: 28 d
Method: OECD Test Guideline 301F
GLP: yes

Inoculum: activated sludge
Concentration: 20 mg DOC/l
Dissolved organic carbon (DOC)
Result: Readily biodegradable.
Biodegradation: > 90 %
Exposure time: 15 d
Method: OECD Test Guideline 301A
GLP: yes

Physico-chemical removability : Remarks: Biodegradable

Stability in water : Test Type: abiotic
Degradation half life (DT50): > 365 d (50 °C) pH: 4 - 9
Method: OECD Test Guideline 111
Photodegradation

Test Type: air
Light source: Sunlight
Sensitiser: OH
Concentration: 500000 molecules/cm³
Rate constant: 3.26727E-11 cm³/(molecule*sec)
Degradation (indirect photolysis): 50 %
Degradation half life: 11.8 h
Method: calculated
GLP: no

Test Type: water
Light source: Other
Light spectrum: 298 - 400 nm
Degradation (direct photolysis): 50 %
Degradation half life: 5,120 d
GLP: No information available.

Butyl 4-hydroxybenzoate:
Biodegradability: aerobic
Inoculum: activated sludge
Concentration: 15 mg/l
Carbon dioxide (CO₂):
Result: Readily biodegradable.
Biodegradation: 64 %
Exposure time: 18 d
Method: OECD Test Guideline 301B
GLP: yes

Isobutyl 4-hydroxybenzoate:
Biodegradability: aerobic
Inoculum: activated sludge
Concentration: 15 mg/l
Carbon dioxide (CO₂):
Result: Readily biodegradable.
Biodegradation: 64 %
Exposure time: 28 d
Method: OECD Test Guideline 301B
GLP: yes
Remarks: By analogy with a product of similar composition

Bioaccumulative potential

Product:
Bioaccumulation: Remarks: not available

Components:
2-Phenoxyethanol:
Bioaccumulation: Species: Other
Bioconcentration factor (BCF): 0.35
Method: calculated
GLP: no

Partition coefficient: n-octanol/water

Butyl 4-hydroxybenzoate:
Partition coefficient: n-octanol/water

Isobutyl 4-hydroxybenzoate:
Partition coefficient: n-octanol/water

Mobility in soil

Product:
Distribution among environmental compartments
Remarks: no data available

Components:
2-Phenoxyethanol:
Distribution among environmental compartments
Remarks: no data available

Other adverse effects
Product:
Environmental fate and pathways
Remarks: no data available

Additional ecological information
The product should not be allowed to enter drains, water courses or the soil. Biologically degradable, when diluted may be degraded in biological purification plants

Components:
2-Phenoxyethanol:
Environmental fate and pathways : no data available

Results of PBT and vPvB assessment : This substance is not considered to be persistent, bioaccumulating and toxic (PBT).

Additional ecological information : The product should not be allowed to enter drains, water courses or the soil.

Butyl 4-hydroxybenzoate:
Results of PBT and vPvB assessment : The substance is not identified as a PBT or as a vPvB substance.

Isobutyl 4-hydroxybenzoate:
Results of PBT and vPvB assessment : The substance is not identified as a PBT or as a vPvB substance.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods
RCRA - Resource Conservation and Recovery Authorization Act : This product, if discarded as sold, is not a Federal RCRA hazardous waste.
Waste Code : NONE

Waste from residues : Must be incinerated in a suitable incineration plant holding a permit delivered by the competent authorities.

Properly containerize and label waste material.
Dispose of any waste residues according to prescribed federal, state and local guidelines, e.g. appropriately permitted chemical waste incinerator.

Contaminated packaging : Regulations concerning reuse or disposal of used packaging materials must be observed.
Contaminated packaging should be emptied as far as possible and after appropriate cleansing may be taken for reuse

SECTION 14. TRANSPORT INFORMATION

DOT : not restricted
IATA : not restricted
IMDG : not restricted
SECTION 15. REGULATORY INFORMATION

CERCLA Reportable Quantity
This material does not contain any components with a CERCLA RQ.

SARA 304 Extremely Hazardous Substances Reportable Quantity
This material does not contain any components with a section 304 EHS RQ.

SARA 302 Extremely Hazardous Substances Threshold Planning Quantity
This material does not contain any components with a section 302 EHS TPQ.

SARA 311/312 Hazards : Acute toxicity (any route of exposure)

SARA 313
The following components are subject to reporting levels established by SARA Title III, Section 313:

- Glycol ether : Not Assigned
  - 70 - 90 %

Clean Water Act
This product does not contain any toxic pollutants listed under the U.S. Clean Water Act Section 307

The components of this product are reported in the following inventories:

TSCA : This product is not listed on the Toxic Substances Control Act (TSCA) Inventory. It can not be used for any commercial purposes except as a bonafide cosmetic or cosmetic adjuvant, additive, or ingredient; or for use in research and development under the supervision of a technically qualified individual to understand its potential hazards.
SAFETY DATA SHEET

PHENONIP

Substance key: 000000056051
Revision Date: 12/04/2020
Version: 8 - 4 / USA
Date of printing: 04/15/2021

SECTION 16. OTHER INFORMATION

Further information

NFPA 704:

Flammability
Health
Special hazard

Full text of other abbreviations

AIIC - Australian Inventory of Industrial Chemicals; ASTM - American Society for the Testing of Materials; bw - Body weight; CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DOT - Department of Transportation; DSL - Domestic Substances List (Canada); ECx - Concentration associated with x% response; EHS - Extremely Hazardous Substance; 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; ERG - Emergency Response Guide; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; HMIS - Hazardous Materials Identification System; 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; MSHA - Mine Safety and Health Administration; n.o.s. - Not Otherwise Specified; NFPA - National Fire Protection Association; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NTP - National Toxicology Program; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance; PICCS - Philippines Inventory of Chemicals and Chemical Substances; (Q)SAR - (Quantitative) Structure Activity Relationship; RCRA - Resource Conservation and Recovery Act; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RO - Reportable Quantity; SADT - Self-Accelerating Decomposition Temperature; SARA - Superfund Amendments and Reauthorization Act; SDS - Safety Data Sheet; TCSI - Taiwan Chemical Substance Inventory; TSCA - Toxic Substances Control Act (United States); UN - United Nations; UNRTDG - United Nations
Recommedations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

Observe national and local legal requirements

Warning
This product is not listed on the TSCA Inventory. It is to be used as a cosmetic ingredient only. Any other use will subject the user to penalties under the Toxic Substances Control Act and the regulations issued thereunder.

For additional information, contact Product Stewardship.

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