SAFETY DATA SHEET

HOSTAGEL PH1

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:
Product Stewardship +1-704-331-7710

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

Trade name: HOSTAGEL PH1
Material number: 240111

Primary product use: Viscosifier
Chemical family: Blend of amine components

SECTION 2. HAZARDS IDENTIFICATION

GHS classification in accordance with 29 CFR 1910.1200

| Flammable liquids         | Category 3      |
| Acute toxicity (Oral)     | Category 4      |
| Skin corrosion            | Category 1B     |
| Serious eye damage        | Category 1      |

GHS label elements
Hazard pictograms:

Signal word: Danger

Hazard statements:
H226 Flammable liquid and vapour.
H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H318 Causes serious eye damage.

Precautionary statements:
Prevention:
P210 Keep away from heat/sparks/open flames/hot surfaces. No smoking.
P233 Keep container tightly closed.
P240 Ground/bond container and receiving equipment.
P241 Use explosion-proof electrical/ ventilating/ lighting/
equipment.
P242 Use only non-sparking tools.
P243 Take precautionary measures against static discharge.
P264 Wash skin thoroughly after handling.
P270 Do not eat, drink or smoke when using this product.
P280 Wear protective gloves/ protective clothing/ eye protection/ face protection.

Response:
P301 + P312 + P330 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell. Rinse mouth.
P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/ shower.
P304 + P340 + P310 IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/ physician.
P305 + P351 + P338 + P310 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER/doctor.
P363 Wash contaminated clothing before reuse.
P370 + P378 In case of fire: Use dry sand, dry chemical or alcohol-resistant foam for extinction.

Storage:
P403 + P235 Store in a well-ventilated place. Keep cool. P405 Store locked up.

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
Substance name : Blend of amine components

<table>
<thead>
<tr>
<th>Hazardous components</th>
<th>CAS-No.</th>
<th>Concentration (% w/w)</th>
</tr>
</thead>
<tbody>
<tr>
<td>2,2’-(Octadec-9-enylimino)bisethanol</td>
<td>25307-17-9</td>
<td>60 - 80</td>
</tr>
<tr>
<td>Octadecyltrimethylammonium chloride</td>
<td>112-03-8</td>
<td>&lt; 20</td>
</tr>
<tr>
<td>Propan-2-ol</td>
<td>67-63-0</td>
<td>&lt; 4</td>
</tr>
<tr>
<td>Propylene Glycol</td>
<td>57-55-6</td>
<td>&gt;= &lt; 10</td>
</tr>
</tbody>
</table>

Any concentration shown as a range is to protect confidentiality or is due to batch variation.
SECTION 4. FIRST AID MEASURES

General advice: Remove/Take off immediately all contaminated clothing. Get medical advice/attention if you feel unwell.

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: Remove contaminated clothing. Flush all affected areas with large amounts of water for at least 15 minutes. Seek medical attention immediately.

In case of eye contact: Immediately flush eyes with large amounts of water for at least 15 minutes, holding lids apart to ensure flushing of the entire surface. Washing eyes within 1 minute is essential to achieve maximum effectiveness. Seek medical attention immediately.

If swallowed: Do NOT induce vomiting. Call a physician immediately.

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: None known.

SECTION 5. FIREFIGHTING MEASURES

Suitable extinguishing media: Water spray jet
Alcohol-resistant foam
Dry powder
Carbon dioxide (CO2)

Unsuitable extinguishing media: High volume water jet

Specific hazards during firefighting: In case of fires, hazardous combustion gases are formed:
Carbon monoxide (CO)
Nitrogen oxides (NOx)
Hydrogen chloride

Further information: Exercise caution when fighting any chemical fire. Use NIOSH approved self-contained breathing apparatus and full protective clothing.

Special protective equipment for firefighters: Wear an approved positive pressure self-contained breathing apparatus in addition to standard fire fighting gear.
SECTION 6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment and emergency procedures:
- Wear suitable protective equipment.
- Ensure adequate ventilation.
- Remove all sparking devices or ignition sources.
- Wearing appropriate personal protective equipment, contain spill, ventilate area of spill or leak. Collect into suitable container.
- Rinse residual with water. Do not allow to contaminate water sources, sewers or soil.

Environmental precautions:
- The product should not be allowed to enter drains, water courses or the soil.

Methods and materials for containment and cleaning up:
- Prevent product from entering drains.
- Non-sparking tools should be used.
- Take measures to prevent the build up of electrostatic charge.
- Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local / national regulations (see section 13).
- Clean contaminated surface thoroughly.

SECTION 7. HANDLING AND STORAGE

Advice on protection against fire and explosion:
- Take measures to prevent the build up of electrostatic charge.

Advice on safe handling:
- Store in a well ventilated area away from heat, sparks or open flames. Keep containers tightly closed when not in use. Wear proper protective equipment.

Technical measures/Precautions:
- Store in original container.
- Keep container closed.

SECTION 8. EXPOSURE CONTROLS/PERSONAL PROTECTION

Components with workplace control parameters

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No.</th>
<th>Value type (Form of exposure)</th>
<th>Control parameters / Permissible concentration</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Propan-2-ol</td>
<td>67-63-0</td>
<td>TWA</td>
<td>200 ppm</td>
<td>ACGIH</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Further information: Central Nervous System impairment, Upper Respiratory Tract irritation, Eye irritation, Substances for which there is a Biological Exposure Index or Indices (see BEI® section), Not classifiable as a human carcinogen</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>STEL</td>
<td>400 ppm</td>
<td>ACGIH</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Further information: Central Nervous System impairment, Upper Respiratory Tract irritation, Eye irritation, Substances for which there is a Biological Exposure Index or Indices (see BEI® section), Not classifiable as a human carcinogen</td>
<td></td>
</tr>
</tbody>
</table>
Further information: The value in mg/m³ is approximate.

<table>
<thead>
<tr>
<th>Substance</th>
<th>TWA</th>
<th>NIOSH REL</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hostagel PH1</td>
<td>400 ppm 980 mg/m³</td>
<td>NIOSH REL</td>
</tr>
<tr>
<td></td>
<td>500 ppm 1,225 mg/m³</td>
<td>NIOSH REL</td>
</tr>
<tr>
<td></td>
<td>400 ppm 980 mg/m³</td>
<td>OSHA Z-1</td>
</tr>
</tbody>
</table>

Propylene Glycol 57-55-6 TWA 10 mg/m³ US WEEL

**Engineering measures**: Use ventilation adequate to keep exposures below recommended exposure limits. See the safety datasheet.

**Personal protective equipment**

*Respiratory protection*: If airborne concentrations pose a health hazard, become irritating or exceed recommended limits, use a NIOSH approved respirator in accordance with OSHA respiratory protection requirements under 29 CFR 1910.134

*Hand protection*:

*Remarks*: Butyl Rubber, PVC Or Neoprene.

*Eye protection*:

*Tightly fitting safety goggles*

*Face-shield*

*Skin and body protection*:

Protective clothing to minimize skin contact should be worn. Chemically resistant safety shoes. Wash contaminated clothing with soap and water and dry before reuse. Safety showers and eyewash stations should be provided in all areas where this material is handled.

*Protective measures*:

Observe the usual precautions for handling chemicals.

*Hygiene measures*:

Wash hands before breaks and at the end of workday. Use protective skin cream before handling the product. Take off immediately all contaminated clothing and wash it before reuse.

**SECTION 9. PHYSICAL AND CHEMICAL PROPERTIES**

*Appearance*: paste

*Colour*: yellow to brownish
Odour : amine-like
Odour Threshold : not tested.

pH : 8 - 9
(20 °C)
Concentration: 10 g/l
Method: DIN EN 1262

Melting point : approx. 15 °C
Method: ISO 3016

Boiling point : approx. 82 °C
Flash point : 45 °C
Method: DIN EN 22719 / ISO 2719 (closed cup), Seta closed cup
Combustion test negative, does not support combustion, not classified as a hazardous substance.

Evaporation rate : not tested.
Flammability (solid, gas) : Not applicable
Flammability (liquids) : Does not sustain combustion.
Self-ignition : Not applicable

Upper explosion limit : 12.7 % (V)
Data relate to solvent

Lower explosion limit : 2 % (V)
Data relate to solvent

Combustion number : Not applicable
Vapour pressure : 43 mbar (20 °C)
Data relate to solvent

Relative vapour density : 2.1
The data refer to the solvent

Density : approx. 0.905 g/cm³ (25 °C)
Method: DIN 51757

Bulk density : Not applicable

Solubility(ies)
Water solubility : miscible

Solubility in other solvents : not tested.
Solvent: fat
SECTION 10. STABILITY AND REACTIVITY

Reactivity : No dangerous reaction known under conditions of normal use.
Chemical stability : Stable under normal conditions.
Possibility of hazardous reactions : No dangerous reaction known under conditions of normal use. Stable
Conditions to avoid : Keep away from heat. Keep away from open flames, hot surfaces and sources of ignition.
Incompatible materials : not known
Hazardous decomposition products : When handled and stored appropriately, no dangerous decomposition products are known

SECTION 11. TOXICOLOGICAL INFORMATION

Information on likely routes of exposure
Eye contact
Skin contact
Ingestion
Inhalation

**Acute toxicity**

**Product:**
Acute inhalation toxicity : Remarks: not tested.

**Components:**

**Propan-2-ol:**
Acute oral toxicity : LD50 (Rat): 5,840 mg/kg
Method: OECD Test Guideline 401
GLP: no

Acute inhalation toxicity : LC50 (Rat, male and female): > 25 mg/l
Exposure time: 6 h
Method: OECD Test Guideline 403
GLP: yes

Acute dermal toxicity : LD50 (Rabbit): ca. 12,800 mg/kg
Method: OECD Test Guideline 402
GLP: no

**Propylene Glycol:**
Acute oral toxicity : LD50 (Rat, male and female): 22,000 mg/kg
Method: Other
GLP: no

Acute inhalation toxicity : LC50 (Rabbit): > 317.042 mg/l
Exposure time: 2 h
Method: Other
GLP: no

Acute dermal toxicity : LD50 (Rabbit): > 2,000 mg/kg
Method: Other
GLP: no

**Skin corrosion/irritation**

**Product:**
Remarks: not tested.

**Components:**

**Propan-2-ol:**
Species: Rabbit
Exposure time: 4 h
Method: Other
Result: No skin irritation
GLP: no
Propylene Glycol:
Species: Rabbit
Exposure time: 4 h
Method: OECD Test Guideline 404
Result: No skin irritation
GLP: No information available.

Serious eye damage/eye irritation

Product:
Remarks: not tested.

Components:
Propan-2-ol:
Species: rabbit eye
Result: Severe eye irritation
Method: OECD Test Guideline 405
GLP: no

Propylene Glycol:
Species: rabbit eye
Result: non-irritant
Method: OECD Test Guideline 405
GLP: No information available.

Respiratory or skin sensitisation

Product:
Remarks: not tested.

Components:
Propan-2-ol:
Test Type: Guinea pig maximization test
Exposure routes: Skin contact
Species: Guinea pig
Method: OECD Test Guideline 406
Result: Does not cause skin sensitisation.
GLP: yes

Propylene Glycol:
Test Type: Guinea pig maximization test
Exposure routes: Skin contact
Species: Guinea pig
Method: OECD Test Guideline 406
Result: Does not cause skin sensitisation.
GLP: No information available.

Test Type: Mouse local lymphnode assay
Exposure routes: Skin contact
Species: Mouse
Method: OECD Test Guideline 429
Result: Does not cause skin sensitisation.
GLP: No information available.

**Germ cell mutagenicity**

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

**Components:**

**Propan-2-ol:**
Genotoxicity in vitro :
Test Type: In vitro gene mutation study in mammalian cells
Species: Chinese hamster ovary cells
Concentration: 500 - 5000 µg/ml
Metabolic activation: with and without
Method: OECD Test Guideline 476
Result: negative
GLP: yes

Species: Salmonella typhimurium
Concentration: 100 - 10000 µg/plate
Metabolic activation: with and without
Method: OECD Test Guideline 471
Result: negative
GLP: no

Genotoxicity in vivo :
Test Type: Micronucleus test
Species: Mouse (male and female)
Strain: ICR
Cell type: Bone marrow
Application Route: Intraperitoneal injection
Exposure time: Single exposure
Dose: 350-1173-2500-3500 mg/kg
Method: OECD Test Guideline 474
Result: negative
GLP: yes

Germ cell mutagenicity - Assessment : It is concluded that the product is not mutagenic based on evaluation of several mutagenicity tests.

**Propylene Glycol:**
Genotoxicity in vitro :
Test Type: Ames test
Species: Salmonella typhimurium
Concentration: <= 10 mg/plate
Metabolic activation: with
Method: Ames test
Result: negative
GLP: No information available.

Genotoxicity in vivo:
- Test Type: Chromosome Aberration Test
- Species: Rat (male)
- Strain: Sprague-Dawley
- Cell type: Bone marrow
- Application Route: oral (gavage)
- Exposure time: 6 - 24 - 48 h
- Dose: 30 - 2500 - 5000 mg/kg
- Method: Other
- Result: negative
- GLP: no

Germ cell mutagenicity - Assessment:
- It is concluded that the product is not mutagenic based on evaluation of several mutagenicity tests.

Carcinogenicity

Product:
- Carcinogenicity - Assessment:
  - No information available.

Components:

Propan-2-ol:
- Carcinogenicity - Assessment:
  - Did not show carcinogenic effects in animal experiments.

Propylene Glycol:
- Carcinogenicity - Assessment:
  - Not classifiable as a human carcinogen.

IARC:
- Not listed
Reproductive toxicity

Product:
Reproductive toxicity - Assessment : No information available.

Components:
Propan-2-ol:
Effects on fertility:
  Test Type: Two-generation study
  Species: Rat
  Sex: male and female
  Dose: 100 - 500 - 1000 mg/kg
  Frequency of Treatment: daily
  Sprague-Dawley
  Application Route: oral (gavage)
  Group: yes
  NOAEL: 500 mg/kg,
  F1: 500 mg/kg,
  F2: 500 mg/kg,
  Method: OECD Test Guideline 416
  GLP: yes

Effects on foetal development:
  Species: Rat
  Application Route: oral (gavage)
  Exposure time: day 6 to 15 of gestation
  Dose: 400 - 800 - 1200 mg/kg
  Group: yes
  400 mg/kg
  400 mg/kg
  Number of exposures: daily
  Method: OECD Test Guideline 414
  GLP: yes

Reproductive toxicity - Assessment : No reproductive toxicity to be expected.
  No teratogenic effects to be expected.

Propylene Glycol:
Effects on fertility:
  Test Type: Two-generation study
  Species: Mouse
  Sex: male and female
  Dose: 1820 - 4800 - 10100 mg/kg
  Exposure time: 126 d
  CD1
Application Route: oral (gavage)
NOAEL: 10,100 mg/kg,
F1: 10,100 mg/kg,
F2: 10,100 mg/kg,
Method: Other
GLP: No information available.

Effects on foetal development :
Species: Mouse
Application Route: oral (gavage)
Exposure time: gestation day 6-15
Dose: 52 - 520 - 10400 mg/kg
Group: yes
10,400 mg/kg
52 mg/kg
Number of exposures: daily
Method: OECD Test Guideline 414
GLP: yes

Reproductive toxicity - Assessment :
No reproductive toxicity to be expected.
No teratogenic effects to be expected.

---

**STOT - single exposure**

**Product:**
Remarks: not tested.

**Components:**

**Propan-2-ol:**
Assessment: May cause drowsiness or dizziness.

**Propylene Glycol:**
Assessment: The substance or mixture is not classified as specific target organ toxicant, single exposure.

---

**STOT - repeated exposure**

**Product:**
Remarks: not tested.

**Components:**

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

**Propylene Glycol:**
Assessment: The substance or mixture is not classified as specific target organ toxicant, repeated exposure.
Repeated dose toxicity

**Product:**
Remarks: not tested.

**Components:**

**Propan-2-ol:**
Application Route: Oral
Remarks: This information is not available.
Species: Rat, male and female
NOAEL: ca. 12.5 mg/l
Application Route: Inhalation
Exposure time: 2 a
Number of exposures: 6 hours/day, 5 days/week
Dose: 500 - 2500 - 5000 ppm
Group: yes
Method: Other
GLP: yes

Application Route: Skin contact
Remarks: This information is not available.

**Propylene Glycol:**
Species: Rat, male and female
NOAEL: 1,700 - 2,100 mg/kg
Application Route: oral (feed)
Exposure time: 2 a
Number of exposures: daily
Dose: 200-2100 mg/kg
Group: yes
Method: Other
GLP: no

Species: Cat, male
NOAEL: 443 mg/kg
Application Route: oral (feed)
Exposure time: 69 - 94 d
Number of exposures: daily
Dose: 80 - 4239 mg/kg
Group: yes
Method: Other
GLP: no

Species: Rat, male and female
NOAEL: 1 - 2.2 mg/l
Application Route: Inhalation
Exposure time: 90 d
Number of exposures: 6 hours/day, 5 days/week
Dose: 0.16 - 1.01 - 2.18 mg/l
Group: yes
Method: Other
GLP: No information available.

Species: Mouse, female
NOAEL: 0.02
Application Route: Skin contact
Exposure time: Lifespan
Number of exposures: 2x / w
Dose: 10-50-100% / 0.02 ml acetone
Group: yes
Method: Other
GLP: no
Remarks: No pathological findings

Aspiration toxicity
Product:
no data available

Components:

Propan-2-ol:
No aspiration toxicity classification

Propylene Glycol:
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: The classification was made by the conventional (calculation) method of the CLP Regulation (EC) No 1272/2008.
no data available

SECTION 12. ECOLOGICAL INFORMATION

Ecotoxicity
Product:
Toxicity to fish : Remarks: not tested.
Toxicity to daphnia and other aquatic invertebrates : Remarks: not tested.
Toxicity to algae: Remarks: not tested.

Toxicity to microorganisms: Remarks: not tested.

Components:

2,2’-(Octadec-9-enylimino)bisethanol:
M-Factor (Acute aquatic toxicity): 10
M-Factor (Chronic aquatic toxicity): 1

Octadecyltrimethylammonium chloride:
M-Factor (Acute aquatic toxicity): 1
M-Factor (Chronic aquatic toxicity): 10

Propan-2-ol:
Toxicity to fish:
LC50 (Pimephales promelas (fathead minnow)): 9,640 - 10,000 mg/l
Exposure time: 96 h
Test Type: flow-through test
Analytical monitoring: yes
Method: OECD Test Guideline 203
GLP: no

Toxicity to daphnia and other aquatic invertebrates:
LC50 (Daphnia magna (Water flea)): > 10,000 mg/l
Exposure time: 24 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:
EC10 (Scenedesmus quadricauda (Green algae)): ca. 1,800 mg/l
Exposure time: 7 d
Test Type: static test
Analytical monitoring: no
Method: Other
GLP: no

Toxicity to fish (Chronic toxicity): Remarks: not required

Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity): Remarks: not required

Toxicity to microorganisms:
EC10 (Pseudomonas putida): ca. 1,050 mg/l
Exposure time: 16 h
Test Type: aquatic
Analytical monitoring: no
Method: DIN 38412 T.8  
GLP: no

Toxicity to soil dwelling organisms: Remarks: Not applicable

Plant toxicity: ICS50 (Lactuca sativa (lettuce)): 2,100 mg/l  
Exposure time: 3 d  
End point: emergence  
Analytical monitoring: no  
Method: Other  
GLP: no

Sediment toxicity: Remarks: Not applicable

Toxicity to terrestrial organisms: Remarks: Not applicable

**Propylene Glycol:**

Toxicity to fish: LC50 (Oncorhynchus mykiss (rainbow trout)): 40,613 mg/l  
Exposure time: 96 h  
Test Type: static test  
Analytical monitoring: yes  
Method: Other  
GLP: no

Toxicity to daphnia and other aquatic invertebrates: LC50 (Mysidopsis bahia (opossum shrimp)): 18,800 mg/l  
Exposure time: 96 h  
Test Type: static test  
Analytical monitoring: yes  
Method: Other  
GLP: yes

Toxicity to algae: EC50 (Pseudokirchneriella subcapitata (green algae)): 19,000 mg/l  
End point: Growth rate  
Exposure time: 96 h  
Test Type: static test  
Analytical monitoring: yes  
Method: OECD Test Guideline 201  
GLP: yes

NOEC (Pseudokirchneriella subcapitata (green algae)): 15,000 mg/l  
End point: Growth rate  
Exposure time: 14 d  
Test Type: static test  
Analytical monitoring: yes  
Method: OECD Test Guideline 201  
GLP: yes

Toxicity to fish (Chronic toxicity): Chronic Toxicity Value (Fish): 2,500 mg/l  
Exposure time: 30 d  
End point: Other  
Method: Other
Toxicity to daphnia and other aquatic invertebrates (Chronic toxicity):

- NOEC (Ceriodaphnia spec.): 13,020 mg/l
- Exposure time: 7 d
- End point: Reproduction rate
- Test Type: semi-static test
- Analytical monitoring: yes
- Method: Other
- GLP: No information available.

Toxicity to microorganisms:

- NOEC (Pseudomonas putida): > 20,000 mg/l
- End point: Growth rate
- Exposure time: 18 h
- Test Type: aquatic
- Analytical monitoring: no
- Method: Other
- GLP: no
- Remarks: The details of the toxic effect relate to the nominal concentration.

Toxicity to soil dwelling organisms:

- Remarks: The study is not necessary from a scientific perspective.

Plant toxicity:

- Remarks: The study is not necessary from a scientific perspective.

Sediment toxicity:

- Remarks: The study is not necessary from a scientific perspective.

Toxicity to terrestrial organisms:

- Remarks: The study is not necessary from a scientific perspective.

Persistence and degradability

**Product:**

Biodegradability:

- Remarks: not tested.

**Components:**

**Propan-2-ol:**

Biodegradability:

- aerobic
- Inoculum: activated sludge, domestic
- Biochemical Oxygen Demand (BOD)
- Result: Readily biodegradable.
- Biodegradation: 53 %
- Exposure time: 5 d
- GLP: no

Stability in water:

- Remarks: Not applicable

**Propylene Glycol:**
Biodegradability:
- aerobic
  - Inoculum: activated sludge, domestic
  - Concentration: 100 mg/l ThOD
  - BOD in % of theoretical OD
  - Result: Readily biodegradable.
  - Biodegradation: 100%
  - Exposure time: 28 d
  - Method: OECD Test Guideline 301F
  - GLP: yes

- aerobic
  - Inoculum: activated sludge, domestic
  - Concentration: 50.3 mg/l
  - CO2 formation in % of theoretical value
  - Result: Readily biodegradable.
  - Biodegradation: 90.6%
  - Exposure time: 64 d
  - Method: OECD Test Guideline 306
  - GLP: yes

Bioaccumulative potential

**Product:**
- Bioaccumulation: Remarks: not tested.

**Components:**

**Propan-2-ol:**
- Bioaccumulation: Remarks: Not applicable

**Propylene Glycol:**
- Bioaccumulation: Bioconcentration factor (BCF): 0.09
  - Method: calculated
  - GLP: no

Mobility in soil

**Product:**
- Distribution among environmental compartments: Remarks: not tested.

**Components:**

**Propan-2-ol:**
- Distribution among environmental compartments: Remarks: Not applicable

**Propylene Glycol:**
- Distribution among environmental compartments: Adsorption/Soil
  - Medium: water - soil
  - log Koc: 0.46
  - Method: other (calculated)
Other adverse effects

Product:

Additional ecological information: The classification was made by the conventional (calculation) method of the CLP Regulation (EC) No 1272/2008. This information is not available.

Components:

Propan-2-ol:
Environmental fate and pathways: not available
Results of PBT and vPvB assessment: This substance is not considered to be persistent, bioaccumulating and toxic (PBT).
Additional ecological information: slightly water endangering
Do not allow to enter ground water, waterways or waste water.

Propylene Glycol:
Environmental fate and pathways: not available
Results of PBT and vPvB assessment: This substance is not considered to be persistent, bioaccumulating and toxic (PBT).
Additional ecological information: Do not allow to enter ground water, waterways or waste water.

SECTION 13. DISPOSAL CONSIDERATIONS

Disposal methods

Waste Code: NONE
Waste from residues: Must be incinerated in a suitable incineration plant holding a permit delivered by the competent authorities.
Contaminated packaging: Packaging that cannot be cleaned should be disposed of as product waste

SECTION 14. TRANSPORT INFORMATION

DOT Regulation:

Proper shipping name: Amines, liquid, corrosive, flammable, n.o.s.
Hazard class: 8
Packing group: II
UN/NA-number: UN 2734
Primary hazard class: 8
SAFETY DATA SHEET

HOSTAGEL PH1

Substance key: 000000411792
Revision Date: 10/20/2016
Version : 5 - 1 / USA
Date of printing : 10/07/2017

Subsidiary hazard class: 3
Technical Name: OLEYLAMINOXETHYLATE
2-Propanol

IATA
Proper shipping name: Amines, liquid, corrosive, flammable, n.o.s.
Class: 8
Packing group: II
UN/ID number: UN 2734
Primary risk: 8
Subsidiary risk: 3
Remarks: Shipment permitted
Hazard inducer(s): OLEYLAMINOXETHYLATE
2-Propanol

IMDG
Proper shipping name: Amines, liquid, corrosive, flammable, n.o.s.
Class: 8
Packing group: II
UN no.: UN 2734
Primary risk: 8
Subsidiary risk: 3
Hazard inducer(s): OLEYLAMINOXETHYLATE
2-Propanol
Hazard inducer / Marine pollutant: OLEYLAMINOXETHYLATE
Marine pollutant: Marine Pollutant
EmS: F-E S-C

SECTION 15. REGULATORY INFORMATION

EPCRA - Emergency Planning and Community Right-to-Know Act
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 311/312 Hazards: Acute Health Hazard
Chronic Health Hazard
Fire Hazard

SARA 302: No chemicals in this material are subject to the reporting requirements of SARA Title III, Section 302.

SARA 313: This product does not contain any toxic chemical listed under Section 313 of the Emergency Planning and Community Right-To-Know Act of 1986.

Clean Water Act
Contains no known priority pollutants at concentrations greater than 0.1%.

The components of this product are reported in the following inventories:
SECTION 16. OTHER INFORMATION

Full text of other abbreviations

AICS - Australian Inventory of Chemical Substances; 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 Recommendations on the Transport of Dangerous Goods; vPvB - Very Persistent and Very Bioaccumulative

Further information

Observe national and local legal requirements
Observe all necessary precautions for handling flammable substances. Keep away from sources of heat and ignition. Smoking should be prohibited where material is being handled. Electrical grounding of equipment is required.

Revision Date : 10/20/2016

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