# **Safety Data Sheet**

According to Regulation (EC) No 1907/2006

# **Hagerty Silver Clean**

Revision: 2015-06-03

Version: 02.0

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

1.1 Product identifier

Trade name: Hagerty Silver Clean

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

AISE-C7 [3] - Surface cleaners (liquid, powder, gel neat, spray neat) for consumer use **Uses advised against:** Uses other than those identified are not recommended

**1.3 Details of the supplier of the safety data sheet** Hagerty SA

Contact details Promenade-Noire 1, CH-2000 Neuchâtel, Switserland Tel +41 32 724 44 64 www.hagertycare.com

**1.4 Emergency telephone number** 24 hour medical emergency telephone number: + 41 44 251 51 51 Swiss Toxicological Information Centre, Zurich

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# **SECTION 2: Hazards identification**

#### 2.1 Classification of the substance or mixture

The product has been classified and labelled in accordance with Regulation (EC) No 1272/2008.

Carc. 2 (H351) Repr. 2 (H361) Eye Irrit. 2 (H319) Aquatic Chronic 3 (H412)

# Classification in accordance with Directive 1999/45/EC and corresponding national legislation Indication of danger

Xn - Harmful

#### **Risk phrases:**

R40 - Limited evidence of a carcinogenic effect.
 R63 - Possible risk of harm to the unborn child.
 R52/53 - Harmful to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

#### 2.2 Label elements



Signal word: Warning.

Contains thiourea (Thiourea).

#### Hazard statements:

- H351 Suspected of causing cancer.
- H361 Suspected of damaging fertility or the unborn child.
- H319 Causes serious eye irritation.

H412 - Harmful to aquatic life with long lasting effects.

#### **Precautionary statements:**

P101 - If medical advice is needed, have product container or label at hand.

P102 - Keep out of reach of children.

P280 - Wear protective gloves, protective clothing and eye or face protection.

P405 - Store locked up.

P501 - Dispose of unused content as chemical waste.

#### 2.3 Other hazards

No other hazards known. The product does not meet the criteria for PBT or vPvB in accordance with Regulation (EC) No 1907/2006, Annex XIII.

# SECTION 3: Composition/information on ingredients

#### 3.2 Mixtures

| Ingredient(s)  | EC number | CAS number | REACH number      | Classification   | Classification<br>(1999/45/EC)                         | Notes | Weight<br>percent |
|--|-----------|------------|-------------------|--|--|-------|-------------------|
| thiourea   | 200-543-5 | 62-56-6    | No data available | Carc. 2 (H351)<br>Repr. 2 (H361)<br>Acute Tox. 4 (H302)<br>Aquatic Chronic 2<br>(H411) | Xn;R22<br>Carc.Cat.3;R40<br>N;R51/53<br>Repr.Cat.3;R63 |       | 3-10              |
| citric acid  | 201-069-1 | 77-92-9    | [1]               | Eye Irrit. 2 (H319)  | Xi;R36   |       | 1-3               |
| alkyl alcohol ethoxylate                               | Polymer*  | 64425-86-1 | [4]               | Acute Tox. 4 (H302)<br>Eye Dam. 1 (H318)<br>Aquatic Acute 1 (H400)                     | Xn;R22<br>Xi;R41<br>N;R50                              |       | 1-3               |
| phosphoric acid  | 231-633-2 | 7664-38-2  | 01-2119485924-24  | Skin Corr. 1B (H314)<br>Met. Corr. 1 (H290)  | C;R34  |       | 1-3               |
| 4,5-dihydro-2-heptadecyl-1H-im<br>idazole-1-ethylamine | 221-133-2 | 3010-23-9  | No data available | Skin Corr. 1B (H314)<br>Aquatic Acute 1 (H400)<br>Aquatic Chronic 1<br>(H410)          | C;R34<br>N;R50/53                                      |       | 0.1-1             |

\* Polymer.

For the full text of the R, H and EUH phrases mentioned in this Section, see Section 16.

Workplace exposure limit(s), if available, are listed in subsection 8.1. [1] Exempted: ionic mixture. See Regulation (EC) No 1907/2006, Annex V, paragraph 3 and 4. This salt is potentially present, based on calculation, and included for classification and labelling purposes only. Each starting material of the ionic mixture is registered, as required.

[2] Exempted: included in Annex IV of Regulation (EC) No 1907/2006.

[3] Exempted: Annex V of Regulation (EC) No 1907/2006

[4] Exempted: polymer. See Article 2(9) of Regulation (EC) No 1907/2006.

# SECTION 4: First aid measures

| 4.1 Description of first aid measures |  |
|---------------------------------------|--|
| General Information:                  | IF exposed or concerned: Get medical attention or advice.  |
| Inhalation                            | Get medical attention or advice if you feel unwell.  |
| Skin contact:                         | Wash skin with plenty of lukewarm, gently flowing water. If skin irritation occurs: Get medical advice or attention.   |
| Eye contact:                          | Immediately rinse eyes cautiously with lukewarm water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. If irritation occurs and persists, get medical attention. |
| Ingestion:                            | Immediately drink 1 glass of water. Get medical attention or advice if you feel unwell.  |
| Self-protection of first aider:       | Consider personal protective equipment as indicated in subsection 8.2.   |
| 4.2 Most important symptoms and effe  | ects, both acute and delayed   |
| Inhalation:                           | Suspected of causing cancer. Suspected of damaging fertility or the unborn child.  |

| Inhalation:   | Suspected of causing cancer. Suspected of damaging fertility or the unborn child. |
|---------------|---|
| Skin contact: | Suspected of causing cancer. Suspected of damaging fertility or the unborn child. |
| Eye contact:  | Causes severe irritation.   |
| Ingestion:    | Suspected of causing cancer. Suspected of damaging fertility or the unborn child. |
|               |   |

#### 4.3 Indication of any immediate medical attention and special treatment needed

No information available on clinical testing and medical monitoring. Specific toxicological information on substances, if available, can be found in section 11.

# SECTION 5: Firefighting measures

#### 5.1 Extinguishing media

Carbon dioxide. Dry powder. Water spray jet. Fight larger fires with water spray jet or alcohol-resistant foam.

# 5.2 Special hazards arising from the substance or mixture

#### No special hazards known.

#### 5.3 Advice for firefighters

As in any fire, wear self contained breathing apparatus and suitable protective clothing including gloves and eye/face protection.

# SECTION 6: Accidental release measures

### 6.1 Personal precautions, protective equipment and emergency procedures

Wear suitable protective clothing, gloves and eye/face protection.

#### 6.2 Environmental precautions

Do not allow to enter drainage system, surface or ground water. Do not allow to enter the ground/soil. Dilute with plenty of water. Inform responsible authorities in case undiluted product reaches drainage system, surface or ground water or the ground/soil.

#### 6.3 Methods and material for containment and cleaning up

Absorb with liquid-binding material (sand, diatomite, universal binders, sawdust).

#### 6.4 Reference to other sections

For personal protective equipment see subsection 8.2. For disposal considerations see section 13.

# SECTION 7: Handling and storage

#### 7.1 Precautions for safe handling

Measures to prevent fire and explosions:

No special precautions required.

#### Measures required to protect the environment:

For environmental exposure controls see subsection 8.2.

#### Advices on general occupational hygiene:

Handle in accordance with good industrial hygiene and safety practice. Keep away from food, drink and animal feeding stuffs. Keep out of reach of children. Do not mix with other products. Wash hands before breaks and at the end of workday. Wash face, hands and any exposed skin thoroughly after handling. Take off immediately all contaminated clothing. Store used personal protective equipment separately. Use personal protective equipment as required. Obtain special instructions before use. Use only with adequate ventilation.

# 7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local and national regulations. Keep locked up and out of the reach of children. Keep only in original container. Store in a closed container.

For conditions to avoid see subsection 10.4. For incompatible materials see subsection 10.5.

#### 7.3 Specific end use(s)

No specific advice for end use available.

# SECTION 8: Exposure controls/personal protection

#### 8.1 Control parameters Workplace exposure limits

Air limit values if available.

| Ingredient(s)   | EU - Long term      | EU - Short term     | UK - Long term      | UK - Short term     |
|-----------------|---------------------|---------------------|---------------------|---------------------|
|                 | value(s)            | value(s)            | value(s)            | value(s)            |
| phosphoric acid | 1 mg/m <sup>3</sup> | 2 mg/m <sup>3</sup> | 1 mg/m <sup>3</sup> | 2 mg/m <sup>3</sup> |

Biological limit values, if available:

Recommended monitoring procedures, if available:

Additional exposure limits under the conditions of use, if available:

#### **DNEL/DMEL and PNEC values**

# Human exposure

| Ingredient(s)                                      | Short term - Local<br>effects | Short term - Systemic<br>effects | Long term - Local<br>effects | Long term - Systemic<br>effects |
|--|-------------------------------|----------------------------------|------------------------------|---------------------------------|
| thiourea   | No data available             | No data available                | No data available            | No data available               |
| citric acid  | -                             | -                                | -                            | -                               |
| alkyl alcohol ethoxylate                           | No data available             | No data available                | No data available            | No data available               |
| phosphoric acid                                    | -                             | -                                | -                            | -                               |
| 4,5-dihydro-2-heptadecyl-1H-imidazole-1-ethylamine | No data available             | No data available                | No data available            | No data available               |

DNEL dermal exposure - Worker

| Ingredient(s)                                      | Short term - Local<br>effects | Short term - Systemic<br>effects (mg/kg bw) | Long term - Local<br>effects | Long term - Systemic<br>effects (mg/kg bw) |
|--|-------------------------------|---|------------------------------|--|
| thiourea   | No data available             | No data available                           | No data available            | No data available                          |
| citric acid  | No data available             | -   | No data available            | -  |
| alkyl alcohol ethoxylate                           | No data available             | No data available                           | No data available            | No data available                          |
| phosphoric acid                                    | No data available             | -   | No data available            | -  |
| 4,5-dihydro-2-heptadecyl-1H-imidazole-1-ethylamine | No data available             | No data available                           | No data available            | No data available                          |

DNEL dermal exposure - Consumer

| Ingredient(s) | Short term - Local | Short term - Systemic | Long term - Local | Long term - Systemic |
|---------------|--------------------|-----------------------|-------------------|----------------------|
|---------------|--------------------|-----------------------|-------------------|----------------------|

|  | effects           | effects (mg/kg bw) | effects           | effects (mg/kg bw) |
|--|-------------------|--------------------|-------------------|--------------------|
| thiourea   | No data available | No data available  | No data available | No data available  |
| citric acid  | No data available | -                  | No data available | -                  |
| alkyl alcohol ethoxylate                           | No data available | No data available  | No data available | No data available  |
| phosphoric acid                                    | No data available | -                  | No data available | -                  |
| 4,5-dihydro-2-heptadecyl-1H-imidazole-1-ethylamine | No data available | No data available  | No data available | No data available  |

DNEL inhalatory exposure - Worker (mg/m<sup>3</sup>)

| Ingredient(s)                                      | Short term - Local<br>effects | Short term - Systemic<br>effects | Long term - Local<br>effects | Long term - Systemic<br>effects |
|--|-------------------------------|----------------------------------|------------------------------|---------------------------------|
| thiourea   | No data available             | No data available                | No data available            | No data available               |
| citric acid  | -                             | -                                | -                            | -                               |
| alkyl alcohol ethoxylate                           | No data available             | No data available                | No data available            | No data available               |
| phosphoric acid                                    | -                             | -                                | 2.92                         | -                               |
| 4,5-dihydro-2-heptadecyl-1H-imidazole-1-ethylamine | No data available             | No data available                | No data available            | No data available               |

DNEL inhalatory exposure - Consumer (mg/m<sup>3</sup>)

| Ingredient(s)                                      | Short term - Local<br>effects | Short term - Systemic<br>effects | Long term - Local<br>effects | Long term - Systemic<br>effects |
|--|-------------------------------|----------------------------------|------------------------------|---------------------------------|
| thiourea   | No data available             | No data available                | No data available            | No data available               |
| citric acid  | -                             | -                                | -                            | -                               |
| alkyl alcohol ethoxylate                           | No data available             | No data available                | No data available            | No data available               |
| phosphoric acid                                    | -                             | -                                | 0.73                         | -                               |
| 4,5-dihydro-2-heptadecyl-1H-imidazole-1-ethylamine | No data available             | No data available                | No data available            | No data available               |

#### Environmental exposure Environmental exposure - PNEC

| Ingredient(s)                                      | Surface water, fresh<br>(mg/l) | Surface water, marine<br>(mg/l) | Intermittent (mg/l) | Sewage treatment<br>plant (mg/l) |
|--|--------------------------------|---------------------------------|---------------------|----------------------------------|
| thiourea   | No data available              | No data available               | No data available   | No data available                |
| citric acid  | 0.44                           | 0.044                           | -                   | > 1000                           |
| alkyl alcohol ethoxylate                           | No data available              | No data available               | No data available   | No data available                |
| phosphoric acid                                    | -                              | -                               | -                   | -                                |
| 4,5-dihydro-2-heptadecyl-1H-imidazole-1-ethylamine | No data available              | No data available               | No data available   | No data available                |

| Environmental exposure - PNEC, continued           |                                 |                             |                    |                    |
|--|---------------------------------|-----------------------------|--------------------|--------------------|
| Ingredient(s)                                      | Sediment, freshwater<br>(mg/kg) | Sediment, marine<br>(mg/kg) | Soil (mg/kg)       | Air (mg/m³)        |
| thiourea   | No data available               | No data available           | No data available  | No data available  |
| citric acid  | 34.6                            | 3.46                        | 33.1               | -                  |
| alkyl alcohol ethoxylate                           | No data available               | No data available           | No data available  | No data available  |
| phosphoric acid                                    |                                 | -                           | -                  |                    |
| 4,5-dihydro-2-heptadecyl-1H-imidazole-1-ethylamine | No data available               | No data available           | No data available  | No data available  |
| 4,5-uinyuro-2-neptadecyi-1H-Imidazole-1-etnylamine | ino dala avallable              | ino dala avallable          | ino dala avallable | INO GALA AVAIIADIE |

### 8.2 Exposure controls

The following information applies for the uses indicated in subsection 1.2. If available, please refer to the product information sheet for application and handling instructions. Normal use conditions are assumed for this section.

Recommended safety measures for handling the <u>undiluted</u> product:

| Appropriate engineering controls:<br>Appropriate organisational controls: | No special requirements under normal use conditions.<br>Avoid direct contact and/or splashes where possible. Train personnel.                              |
|---|--|
| Personal protective equipment   |  |
| Eye / face protection:  | Safety glasses or goggles (EN 166).  |
| Hand protection:  | Chemical-resistant protective gloves (EN 374).<br>Verify instructions regarding permeability and breakthrough time, as provided by the gloves<br>supplier. |
|   | Consider specific local use conditions, such as risk of splashes, cuts, contact time and temperature.  |
|   | Suggested gloves for prolonged contact:<br>Material: butyl rubber<br>Penetration time: >= 480 min<br>Material thickness: >= 0.7 mm                         |
|   | Suggested gloves for protection against splashes:<br>Material: nitrile rubber  |
|   | Penetration time: >= 30 min  |
|   | Material thickness: >= 0.4 mm  |
|   | In consultation with the supplier of protective gloves a different type providing similar protection may be chosen.  |
| Body protection:  | Wear chemical-resistant clothing and boots in case direct dermal exposure and/or splashes may occur.   |

#### **Respiratory protection:**

No special requirements under normal use conditions.

#### Environmental exposure controls:

No special requirements under normal use conditions.

# SECTION 9: Physical and chemical properties

#### 9.1 Information on basic physical and chemical properties

Information in this section refers to the product, unless it is specifically stated that substance data is listed

#### Method / remark

Physical State: Liquid Colour: Clear, Blue Odour: Slightly perfumed Odour threshold: Not applicable pH: < 2 (neat) Melting point/freezing point (°C): Not determined Initial boiling point and boiling range (°C): Not determined

Substance data, boiling point

| Ingredient(s)                                      | Value<br>(°C)     | Method           | Atmospheric pressure<br>(hPa) |
|--|-------------------|------------------|-------------------------------|
| thiourea   | No data available |                  |                               |
| citric acid  | No data available |                  |                               |
| alkyl alcohol ethoxylate                           | No data available |                  |                               |
| phosphoric acid                                    | 158               | Method not given | 1013                          |
| 4,5-dihydro-2-heptadecyl-1H-imidazole-1-ethylamine | No data available |                  |                               |

#### Method / remark

Flash point (°C): Not applicable. Sustained combustion: Not determined Evaporation rate: Not determined Flammability (solid, gas): Not determined Upper/lower flammability limit (%): Not determined

Substance data, flammability or explosive limits, if available:

#### Method / remark

Substance data, vapour pressure

Vapour pressure: Not determined

| Ingredient(s)                                      | Value<br>(Pa)     | Method           | Temperature<br>(°C) |
|--|-------------------|------------------|---------------------|
| thiourea   | No data available |                  |                     |
| citric acid  | No data available |                  |                     |
| alkyl alcohol ethoxylate                           | No data available |                  |                     |
| phosphoric acid                                    | 4                 | Method not given | 20                  |
| 4,5-dihydro-2-heptadecyl-1H-imidazole-1-ethylamine | No data available |                  |                     |

#### Method / remark

Relative density: 1.04 g/cm<sup>3</sup> (20 °C) Solubility in / Miscibility with Water: Fully miscible

Substance data, solubility in water

Vapour density: Not determined

| Ingredient(s)                                      | Value<br>(g/l)    | Method           | Temperature<br>(°C) |
|--|-------------------|------------------|---------------------|
| thiourea   | Soluble           |                  |                     |
| citric acid  | 1630              | Method not given |                     |
| alkyl alcohol ethoxylate                           | No data available |                  |                     |
| phosphoric acid                                    | Soluble           |                  |                     |
| 4,5-dihydro-2-heptadecyl-1H-imidazole-1-ethylamine | No data available |                  |                     |

Substance data, partition coefficient n-octanol/water (log Kow): see subsection 12.3

Autoignition temperature: Not determined Decomposition temperature: Not determined Viscosity: Not determined Explosive properties: Not explosive. Oxidising properties: Not oxidising

9.2 Other information Surface tension (N/m): Not determined Corrosion to metals: Not corrosive

# Method / remark

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Substance data, dissociation constant, if available:

# SECTION 10: Stability and reactivity

#### 10.1 Reactivity

No reactivity hazards known under normal storage and use conditions.

### 10.2 Chemical stability

Stable under normal storage and use conditions.

#### 10.3 Possibility of hazardous reactions

No hazardous reactions known under normal storage and use conditions.

### 10.4 Conditions to avoid

None known under normal storage and use conditions.

### 10.5 Incompatible materials

Reacts with alkali. Keep away from products containing chlorine-based bleaching agents or sulphites.

#### 10.6 Hazardous decomposition products

None known under normal storage and use conditions. Sulphur dioxide.

# **SECTION 11: Toxicological information**

#### 11.1 Information on toxicological effects

#### Mixture data:

#### Relevant calculated ATE(s): ATE - Oral (mg/kg): >2000

Substance data, where relevant and available, are listed below.

# Acute toxicity

| Ingredient(s)                                      | Endpoint | Value<br>(mg/kg)     | Species | Method                           | Exposure<br>time (h) |
|--|----------|----------------------|---------|----------------------------------|----------------------|
| thiourea   | LD 50    | 1750                 | Rat     | Method not given                 |                      |
| citric acid  | LD 50    | 3000                 | Rat     | Method not given                 |                      |
| alkyl alcohol ethoxylate                           |          | No data<br>available |         |                                  |                      |
| phosphoric acid                                    | LD 50    | 2600                 | Rat     | OECD 423 (EU B.1 tris)           | -                    |
| 4,5-dihydro-2-heptadecyl-1H-imidazole-1-ethylamine | LD 50    | > 2000               | Rat     | OECD 401 (EU B.1)<br>Read across |                      |

Acute dermal toxicity

| Ingredient(s)                                      | Endpoint | Value<br>(mg/kg)     | Species | Method           | Exposure<br>time (h) |
|--|----------|----------------------|---------|------------------|----------------------|
| thiourea   | LD 50    | 2800                 | Rat     | Method not given |                      |
| citric acid  | LD 50    | > 2000               | Rat     | Method not given |                      |
| alkyl alcohol ethoxylate                           |          | No data<br>available |         |                  |                      |
| phosphoric acid                                    | LD 50    | 2740                 | Rabbit  | Method not given | -                    |
| 4,5-dihydro-2-heptadecyl-1H-imidazole-1-ethylamine |          | No data<br>available |         |                  |                      |

Acute inhalative toxicity

| Ingredient(s)                                      | Endpoint | Value<br>(mg/l)      | Species | Method           | Exposure<br>time (h) |
|--|----------|----------------------|---------|------------------|----------------------|
| thiourea   |          | No data<br>available |         |                  |                      |
| citric acid  |          | No data<br>available |         |                  |                      |
| alkyl alcohol ethoxylate                           |          | No data<br>available |         |                  |                      |
| phosphoric acid                                    | LC 50    | 850                  | Rat     | Method not given | 2                    |
| 4,5-dihydro-2-heptadecyl-1H-imidazole-1-ethylamine |          | No data<br>available |         |                  |                      |

#### Irritation and corrosivity Skin irritation and corrosivity

| Ingredient(s) Result Species Method Exposure time |
|---|
|---|

| thiourea   | No data available |        |                   |            |
|--|-------------------|--------|-------------------|------------|
| citric acid  | Not irritant      | Rabbit | OECD 404 (EU B.4) |            |
| alkyl alcohol ethoxylate                           | No data available |        |                   |            |
| phosphoric acid                                    | Corrosive         | Rabbit | OECD 404 (EU B.4) |            |
| 4,5-dihydro-2-heptadecyl-1H-imidazole-1-ethylamine | Irritant          | Rabbit | Method not given  | 48 hour(s) |

Eye irritation and corrosivity

| Ingredient(s)                                      | Result            | Species | Method            | Exposure time |
|--|-------------------|---------|-------------------|---------------|
| thiourea   | No data available |         |                   |               |
| citric acid  | Severe damage     | Rabbit  | OECD 405 (EU B.5) |               |
| alkyl alcohol ethoxylate                           | No data available |         |                   |               |
| phosphoric acid                                    | Severe damage     | Rabbit  | Method not given  |               |
| 4,5-dihydro-2-heptadecyl-1H-imidazole-1-ethylamine | Severe damage     | Rabbit  | OECD 405 (EU B.5) |               |

Respiratory tract irritation and corrosivity

| Ingredient(s)                                      | Result            | Species | Method | Exposure time |
|--|-------------------|---------|--------|---------------|
| thiourea   | No data available |         |        |               |
| citric acid  | No data available |         |        |               |
| alkyl alcohol ethoxylate                           | No data available |         |        |               |
| phosphoric acid                                    | No data available |         |        |               |
| 4,5-dihydro-2-heptadecyl-1H-imidazole-1-ethylamine | No data available |         |        |               |

# Sensitisation

| Ingredient(s)                                      | Result            | Species    | Method           | Exposure time (h) |
|--|-------------------|------------|------------------|-------------------|
| thiourea   | No data available |            |                  |                   |
| citric acid  | Not sensitising   | Guinea pig | Method not given |                   |
| alkyl alcohol ethoxylate                           | No data available |            |                  |                   |
| phosphoric acid                                    | Not sensitising   | Human      | Human experience | -                 |
| 4,5-dihydro-2-heptadecyl-1H-imidazole-1-ethylamine | No data available |            |                  |                   |

#### Sensitisation by inhalation

| Ingredient(s)                                      | Result            | Species | Method | Exposure time |
|--|-------------------|---------|--------|---------------|
| thiourea   | No data available |         |        |               |
| citric acid  | No data available |         |        |               |
| alkyl alcohol ethoxylate                           | No data available |         |        |               |
| phosphoric acid                                    | No data available |         |        | -             |
| 4,5-dihydro-2-heptadecyl-1H-imidazole-1-ethylamine | No data available |         |        |               |

# CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

| Ingredient(s)  | Result (in-vitro) | Method<br>(in-vitro)   | Result (in-vivo)                                   | Method<br>(in-vivo) |
|--|-------------------|--|--|---------------------|
| thiourea   | No data available |  | No data available                                  |                     |
| citric acid  | No data available |  | No evidence of genotoxicity, negative test results | Method not<br>given |
| alkyl alcohol ethoxylate                               | No data available |  | No data available                                  |                     |
|  |                   | OECD 471 (EU<br>B.12/13) OECD<br>473 OECD 476<br>(Mouse<br>lymphoma) |  |                     |
| 4,5-dihydro-2-heptadecyl-1H-imidazole-1-ethyla<br>mine | No data available |  | No data available                                  |                     |

#### Carcinogenicity

| Ingredient(s)                                      | Effect   |
|--|--|
| thiourea   | Limited evidence of a carcinogenic effect.             |
| citric acid  | No evidence for carcinogenicity, negative test results |
| alkyl alcohol ethoxylate                           | No data available                                      |
| phosphoric acid                                    | No data available                                      |
| 4,5-dihydro-2-heptadecyl-1H-imidazole-1-ethylamine | No data available                                      |

Toxicity for reproduction Exposure Endpoint Specific effect Value Species Method Remarks and other effects Ingredient(s) (mg/kg bw/d) time reported thiourea Teratogenic effects No data Indications of possible available teratogenicity citric acid No data No evidence for reproductive available toxicity alkyl alcohol ethoxylate No data available phosphoric acid NOAEL Developmental toxicity 410 Rat OECD 422, 10 day(s) No evidence for reproductive toxicity No evidence for oral Page 7/13 developmental toxicity

| 4,5-dihydro-2-heptadec  |  | No data   |  |  |
|-------------------------|--|-----------|--|--|
| yl-1H-imidazole-1-ethyl |  | available |  |  |
| amine                   |  |           |  |  |

Repeated dose toxicity Sub-acute or sub-chronic oral toxicity

| Ingredient(s)                                      | Endpoint | Value<br>(mg/kg bw/d) | Species | Method            | Exposure<br>time (days) | Specific effects and organs<br>affected |
|--|----------|-----------------------|---------|-------------------|-------------------------|---|
| thiourea   |          | No data<br>available  |         |                   |                         |   |
| citric acid  |          | No data<br>available  |         |                   |                         |   |
| alkyl alcohol ethoxylate                           |          | No data<br>available  |         |                   |                         |   |
| phosphoric acid                                    | NOAEL    | 250                   | Rat     | OECD 422,<br>oral | -                       |   |
| 4,5-dihydro-2-heptadecyl-1H-imidazole-1-ethylamine |          | No data<br>available  |         |                   |                         |   |

# Sub-chronic dermal toxicity

| Ingredient(s)                                      | Endpoint | Value<br>(mg/kg bw/d) | Species | Method | Exposure<br>time (days) | Specific effects and organs<br>affected |
|--|----------|-----------------------|---------|--------|-------------------------|---|
| thiourea   |          | No data<br>available  |         |        |                         |   |
| citric acid  |          | No data<br>available  |         |        |                         |   |
| alkyl alcohol ethoxylate                           |          | No data<br>available  |         |        |                         |   |
| phosphoric acid                                    |          | No data<br>available  |         |        | -                       |   |
| 4,5-dihydro-2-heptadecyl-1H-imidazole-1-ethylamine |          | No data<br>available  |         |        |                         |   |

### Sub-chronic inhalation toxicity

| Ingredient(s)                                      | Endpoint | Value<br>(mg/kg bw/d) | Species | Method | Exposure<br>time (days) | Specific effects and organs<br>affected |
|--|----------|-----------------------|---------|--------|-------------------------|---|
| thiourea   |          | No data<br>available  |         |        |                         |   |
| citric acid  |          | No data<br>available  |         |        |                         |   |
| alkyl alcohol ethoxylate                           |          | No data<br>available  |         |        |                         |   |
| phosphoric acid                                    |          | No data<br>available  |         |        | -                       |   |
| 4,5-dihydro-2-heptadecyl-1H-imidazole-1-ethylamine |          | No data<br>available  |         |        |                         |   |

#### Chronic toxicity

| Ingredient(s)  | Exposure<br>route | Endpoint | Value<br>(mg/kg bw/d) | Species | Method | Exposure<br>time | Specific effects and<br>organs affected | Remark |
|--|-------------------|----------|-----------------------|---------|--------|------------------|---|--------|
| thiourea   |                   |          | No data<br>available  |         |        |                  |   |        |
| citric acid  |                   |          | No data<br>available  |         |        |                  |   |        |
| alkyl alcohol ethoxylate                                   |                   |          | No data<br>available  |         |        |                  |   |        |
| phosphoric acid  |                   |          | No data<br>available  |         |        |                  |   |        |
| 4,5-dihydro-2-heptadec<br>yl-1H-imidazole-1-ethyl<br>amine |                   |          | No data<br>available  |         |        |                  |   |        |

### STOT-single exposure

| Ingredient(s)                                      | Affected organ(s) |
|--|-------------------|
| thiourea   | No data available |
| citric acid  | No data available |
| alkyl alcohol ethoxylate                           | No data available |
| phosphoric acid                                    | No data available |
| 4,5-dihydro-2-heptadecyl-1H-imidazole-1-ethylamine | No data available |

STOT-repeated exposure

| Ingredient(s)                                      | Affected organ(s) |
|--|-------------------|
| thiourea   | No data available |
| citric acid  | No data available |
| alkyl alcohol ethoxylate                           | No data available |
| phosphoric acid                                    | No data available |
| 4,5-dihydro-2-heptadecyl-1H-imidazole-1-ethylamine | No data available |

Aspiration hazard Substances with an aspiration hazard (H304), if any, are listed in section 3. If relevant, see section 9 for dynamic viscosity and relative density of the product.

Potential adverse health effects and symptoms Effects and symptoms related to the product, if any, are listed in subsection 4.2.

# **SECTION 12: Ecological information**

#### 12.1 Toxicity

No data is available on the mixture.

Substance data, where relevant and available, are listed below

# Aquatic short-term toxicity Aquatic short-term toxicity - fish

| Ingredient(s)                                      | Endpoint | Value<br>(mg/l)      | Species             | Method                  | Exposure<br>time (h) |
|--|----------|----------------------|---------------------|-------------------------|----------------------|
| thiourea   |          | No data<br>available |                     |                         | -                    |
| citric acid  | LC 50    | 440                  | Leuciscus idus      | Method not given        | 48                   |
| alkyl alcohol ethoxylate                           |          | No data<br>available |                     |                         |                      |
| phosphoric acid                                    | LC 50    | 138                  | Gambusia<br>affinis | Method not given        | 96                   |
| 4,5-dihydro-2-heptadecyl-1H-imidazole-1-ethylamine | LC 50    | 0.35                 | Fish                | OECD 203 Read<br>across | 96                   |

| Ingredient(s)                                      | Endpoint | Value<br>(mg/l)      | Species                 | Method                  | Exposure<br>time (h) |
|--|----------|----------------------|-------------------------|-------------------------|----------------------|
| thiourea   | EC 50    | 9                    | Daphnia<br>magna Straus | Method not given        | 48                   |
| citric acid  | EC 50    | 1535                 | Daphnia<br>magna Straus | Method not given        | 24                   |
| alkyl alcohol ethoxylate                           |          | No data<br>available |                         |                         |                      |
| phosphoric acid                                    | EC 50    | > 100                | Daphnia<br>magna Straus | OECD 202                | 48                   |
| 4,5-dihydro-2-heptadecyl-1H-imidazole-1-ethylamine | EC 50    | 0.29                 | Daphnia<br>magna Straus | OECD 202 Read<br>across | 48                   |

| Ingredient(s)                                      | Endpoint | Value<br>(mg/l)      | Species                    | Method           | Exposure<br>time (h) |
|--|----------|----------------------|----------------------------|------------------|----------------------|
| thiourea   |          | No data<br>available |                            |                  | -                    |
| citric acid  | LC 50    | 425                  | Scenedesmus<br>quadricauda | Method not given | 168                  |
| alkyl alcohol ethoxylate                           |          | No data<br>available |                            |                  |                      |
| phosphoric acid                                    | EC 50    | > 100                | Desmodesmus<br>subspicatus | OECD 201         | 72                   |
| 4,5-dihydro-2-heptadecyl-1H-imidazole-1-ethylamine |          | No data<br>available |                            |                  | -                    |

| Ingredient(s)                                      | Endpoint | Value<br>(mg/l)      | Species | Method | Exposure<br>time (days) |
|--|----------|----------------------|---------|--------|-------------------------|
| thiourea   |          | No data<br>available |         |        | -                       |
| citric acid  |          | No data<br>available |         |        | -                       |
| alkyl alcohol ethoxylate                           |          | No data<br>available |         |        |                         |
| phosphoric acid                                    |          | No data<br>available |         |        | -                       |
| 4,5-dihydro-2-heptadecyl-1H-imidazole-1-ethylamine |          | No data<br>available |         |        | -                       |

| Ingredient(s)                                      | Endpoint | Value<br>(mg/l)      | Inoculum              | Method           | Exposure<br>time |
|--|----------|----------------------|-----------------------|------------------|------------------|
| thiourea   |          | No data<br>available |                       |                  |                  |
| citric acid  | EC 50    | > 10000              | Pseudomonas<br>putida | Method not given | 16 hour(s)       |
| alkyl alcohol ethoxylate                           |          | No data<br>available |                       |                  |                  |
| phosphoric acid                                    | EC 50    | 270                  | Activated<br>sludge   | Method not given |                  |
| 4,5-dihydro-2-heptadecyl-1H-imidazole-1-ethylamine |          | No data<br>available |                       |                  |                  |

# Aquatic long-term toxicity

| Ingredient(s)                                      | Endpoint | Value<br>(mg/l)      | Species | Method | Exposure<br>time | Effects observed |
|--|----------|----------------------|---------|--------|------------------|------------------|
| thiourea   |          | No data<br>available |         |        |                  |                  |
| citric acid  |          | No data<br>available |         |        |                  |                  |
| alkyl alcohol ethoxylate                           |          | No data<br>available |         |        |                  |                  |
| phosphoric acid                                    |          | No data<br>available |         |        |                  |                  |
| 4,5-dihydro-2-heptadecyl-1H-imidazole-1-ethylamine |          | No data<br>available |         |        |                  |                  |

#### Aquatic long-term toxicity - crustacea

| Ingredient(s)                                      | Endpoint | Value<br>(mg/l)      | Species | Method | Exposure<br>time | Effects observed |
|--|----------|----------------------|---------|--------|------------------|------------------|
| thiourea   |          | No data<br>available |         |        |                  |                  |
| citric acid  |          | No data<br>available |         |        |                  |                  |
| alkyl alcohol ethoxylate                           |          | No data<br>available |         |        |                  |                  |
| phosphoric acid                                    |          | No data<br>available |         |        |                  |                  |
| 4,5-dihydro-2-heptadecyl-1H-imidazole-1-ethylamine |          | No data<br>available |         |        |                  |                  |

### Aquatic toxicity to other aquatic benthic organisms, including sediment-dwelling organisms, if available:

| Ingredient(s)                                      | Endpoint | Value<br>(mg/kg dw<br>sediment) | Species | Method | Exposure<br>time (days) | Effects observed |
|--|----------|---------------------------------|---------|--------|-------------------------|------------------|
| thiourea   |          | No data<br>available            |         |        | -                       |                  |
| citric acid  |          | No data<br>available            |         |        | -                       |                  |
| alkyl alcohol ethoxylate                           |          | No data<br>available            |         |        |                         |                  |
| phosphoric acid                                    |          | No data<br>available            |         |        | -                       |                  |
| 4,5-dihydro-2-heptadecyl-1H-imidazole-1-ethylamine |          | No data<br>available            |         |        | -                       |                  |

Terrestrial toxicity Terrestrial toxicity - soil invertebrates, including earthworms, if available:

| Ingredient(s)                                      | Endpoint | Value<br>(mg/kg dw<br>soil) | Species | Method | Exposure<br>time (days) | Effects observed |
|--|----------|-----------------------------|---------|--------|-------------------------|------------------|
| thiourea   |          | No data<br>available        |         |        | -                       |                  |
| citric acid  |          | No data<br>available        |         |        | -                       |                  |
| phosphoric acid                                    |          | No data<br>available        |         |        | -                       |                  |
| 4,5-dihydro-2-heptadecyl-1H-imidazole-1-ethylamine |          | No data<br>available        |         |        | -                       |                  |

Terrestrial toxicity - plants, if available:

| Ingredient(s)                                      | Endpoint | Value<br>(mg/kg dw<br>soil) | Species | Method | Exposure<br>time (days) | Effects observed |
|--|----------|-----------------------------|---------|--------|-------------------------|------------------|
| thiourea   |          | No data<br>available        |         |        | -                       |                  |
| citric acid  |          | No data<br>available        |         |        | -                       |                  |
| phosphoric acid                                    |          | No data<br>available        |         |        | -                       |                  |
| 4,5-dihydro-2-heptadecyl-1H-imidazole-1-ethylamine |          | No data<br>available        |         |        | -                       |                  |

# Terrestrial toxicity - birds, if available:

| Ingredient(s)                                      | Endpoint | Value                | Species | Method | Exposure<br>time (days) | Effects observed |
|--|----------|----------------------|---------|--------|-------------------------|------------------|
| thiourea   |          | No data<br>available |         |        | -                       |                  |
| citric acid  |          | No data<br>available |         |        | -                       |                  |
| phosphoric acid                                    |          | No data<br>available |         |        | -                       |                  |
| 4,5-dihydro-2-heptadecyl-1H-imidazole-1-ethylamine |          | No data<br>available |         |        | -                       |                  |

#### Terrestrial toxicity - beneficial insects, if available:

| Ingredient(s)                                      | Endpoint | Value<br>(mg/kg dw<br>soil) | Species | Method | Exposure<br>time (days) | Effects observed |
|--|----------|-----------------------------|---------|--------|-------------------------|------------------|
| thiourea   |          | No data<br>available        |         |        | -                       |                  |
| citric acid  |          | No data<br>available        |         |        | -                       |                  |
| phosphoric acid                                    |          | No data<br>available        |         |        | -                       |                  |
| 4,5-dihydro-2-heptadecyl-1H-imidazole-1-ethylamine |          | No data<br>available        |         |        | -                       |                  |

Terrestrial toxicity - soil bacteria, if available:

| Ingredient(s)                                      | Endpoint | Value<br>(mg/kg dw<br>soil) | Species | Method | Exposure<br>time (days) | Effects observed |
|--|----------|-----------------------------|---------|--------|-------------------------|------------------|
| thiourea   |          | No data<br>available        |         |        | -                       |                  |
| citric acid  |          | No data<br>available        |         |        | -                       |                  |
| phosphoric acid                                    |          | No data<br>available        |         |        | -                       |                  |
| 4,5-dihydro-2-heptadecyl-1H-imidazole-1-ethylamine |          | No data<br>available        |         |        | -                       |                  |

#### 12.2 Persistence and degradability

### Abiotic degradation

Abiotic degradation - photodegradation in air, if available:

Abiotic degradation - hydrolysis, if available:

Abiotic degradation - other processes, if available:

# Biodegradation

| Ready biodegradability - aerobic conditions        |          |                      |                   |                  |                                      |
|--|----------|----------------------|-------------------|------------------|--------------------------------------|
| Ingredient(s)                                      | Inoculum | Analytical<br>method | DT 50             | Method           | Evaluation                           |
| thiourea   |          |                      |                   |                  | Not readily biodegradable.           |
| citric acid  |          |                      | 97 % in 28 day(s) | Method not given | Readily biodegradable                |
| alkyl alcohol ethoxylate                           |          |                      |                   |                  | No data available                    |
| phosphoric acid                                    |          |                      |                   |                  | Not applicable (inorganic substance) |
| 4,5-dihydro-2-heptadecyl-1H-imidazole-1-ethylamine |          |                      |                   | OECD 301B        | Not readily biodegradable.           |

Ready biodegradability - anaerobic and marine conditions, if available:

Degradation in relevant environmental compartments, if available:

The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No. 648/2004 on detergents. Data to support this assertion are held at the disposal of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.

#### 12.3 Bioaccumulative potential

| Partition coefficient n-octanol/water (log h           |                   |                  |                             |        |
|--|-------------------|------------------|-----------------------------|--------|
| Ingredient(s)  | Value             | Method           | Evaluation                  | Remark |
| thiourea   | < 1               | Method not given | No bioaccumulation expected |        |
| citric acid  | -1.72             |                  | No bioaccumulation expected |        |
| alkyl alcohol ethoxylate                               | No data available |                  |                             |        |
| phosphoric acid  | No data available |                  | No bioaccumulation expected |        |
| 4,5-dihydro-2-heptadecyl-1H-imidazole-<br>1-ethylamine | No data available |                  |                             |        |

**Bioconcentration factor (BCF)** 

| Ingredient(s)  | Value             | Species | Method | Evaluation                  | Remark |
|--|-------------------|---------|--------|-----------------------------|--------|
| thiourea   | No data available |         |        |                             |        |
| citric acid  | No data available |         |        |                             |        |
| alkyl alcohol ethoxylate                                   | No data available |         |        |                             |        |
| phosphoric acid  | No data available |         |        | No bioaccumulation expected |        |
| 4,5-dihydro-2-heptadec<br>yl-1H-imidazole-1-ethyl<br>amine |                   |         |        |                             |        |

#### 12.4 Mobility in soil

| Adsorption/Desorption to soil or sediment |                                      |   |        |                       |                                |
|---|--------------------------------------|---|--------|-----------------------|--------------------------------|
| Ingredient(s)                             | Adsorption<br>coefficient<br>Log Koc | Desorption<br>coefficient<br>Log Koc(des) | Method | Soil/sediment<br>type | Evaluation                     |
| thiourea                                  | No data available                    | 21 / 11 and                               |        |                       | High potential for mobility in |

|  |                   |  | soil   |
|--|-------------------|--|--|
| citric acid  | No data available |  | Potential for mobility in soil, soluble in water |
| alkyl alcohol ethoxylate                           | No data available |  |  |
| phosphoric acid                                    | No data available |  | Potential for mobility in soil, soluble in water |
| 4,5-dihydro-2-heptadecyl-1H-imidazole-1-ethylamine | No data available |  |  |

#### 12.5 Results of PBT and vPvB assessment

Substances that fulfill the criteria for PBT/vPvB, if any, are listed in section 3.

#### 12.6 Other adverse effects

No other adverse effects known.

# SECTION 13: Disposal considerations

| 13.1 Waste treatment methods |   |
|------------------------------|---|
| Waste from residues / unused | Т |
| products:                    | С |
|                              | ~ |

The concentrated contents or contaminated packaging should be disposed of by a certified handler or according to the site permit. Release of waste to sewers is discouraged. The cleaned packaging material is suitable for energy recovery or recycling in line with local legislation. 20 01 29\* - detergents containing dangerous substances.

European Waste Catalogue:

Empty packaging Recommendation: Suitable cleaning agents:

Dispose of observing national or local regulations. Water, if necessary with cleaning agent.

# **SECTION 14: Transport information**

# ADR, RID, ADN, IMO/IMDG, ICAO/IATA

14.1 UN number: Non-dangerous goods

14.2 UN proper shipping name: Non-dangerous goods

14.3 Transport hazard class(es): Non-dangerous goods

14.4 Packing group: Non-dangerous goods

14.5 Environmental hazards: Non-dangerous goods

14.6 Special precautions for user: Non-dangerous goods

14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code: The product is not transported in bulk tankers.

#### Other relevant information:

# SECTION 15: Regulatory information

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

Authorisations or restrictions (Regulation (EC) No 1907/2006, Title VII respectively Title VIII): Not applicable.

#### Ingredients according to EC Detergents Regulation 648/2004 non-ionic surfactants

perfumes

15.2 Chemical safety assessment

A chemical safety assessment has not been carried out on the mixture

### **SECTION 16: Other information**

The information in this document is based on our best present knowledge. However, it does not constitute a guarantee for any specific product features and does not establish a legally binding contract

SDS code: MS1001259

Version: 02.0

#### Reason for revision:

Overall design adjusted in accordance with Amendment 453/2010, Annex II of Regulation (EC) No 1907/2006, This data sheet contains changes from the previous version in section(s):, 8

#### **Classification procedure**

The classification of the mixture is in general based on calculation methods using substance data, as required by Regulation (EC) No 1272/2008. If for certain classifications data on the mixture is available or for example bridging principles or weight of evidence can be used for classification, this will be indicated in the relevant sections of the Safety Data Sheet. See section 9 for physical chemical properties, section 11 for toxicological information and section 12 for ecological information.

#### Full text of the R, H and EUH phrases mentioned in section 3:

H290 - May be corrosive to metals.

• H302 - Harmful if swallowed.

H314 - Causes severe skin burns and eye damage.

**Revision:** 2015-06-03

< 5%

- H318 Causes serious eye damage.
- H319 Causes serious eye damage.
  H319 Causes serious eye irritation.
  H351 Suspected of causing cancer.
- H361 Suspected of damaging fertility or the unborn child.
- H400 Very toxic to aquatic life.
- H410 Very toxic to aquatic life with long lasting effects.
  H411 Toxic to aquatic life with long lasting effects.
  R22 Harmful if swallowed.
  R34 Causes burns.

- R36 Irritating to eyes.
  R40 Limited evidence of a carcinogenic effect.
- R41 Risk of serious damage to eyes.
- R50 Very toxic to aquatic organisms. • R63 - Possible risk of harm to the unborn child.
- R50/53 Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.
   R51/53 Toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment.

#### Abbreviations and acronyms:

- AISE The international Association for Soaps, Detergents and Maintenance Products
- DNEL Derived No Effect Limit
- EUH CLP Specific hazard statement
- PBT Persistent, Bioaccumulative and Toxic
   PNEC Predicted No Effect Concentration
- REACH number REACH registration number, without supplier specific part
   vPvB very Persistent and very Bioaccumulative
   ATE Acute Toxicity Estimate

#### End of Safety Data Sheet