

Safety Data Sheet

According to Regulation (EC) No 1907/2006

Diverclean Hypochlorite

Revision: 2018-03-05 **Version:** 02.0

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

1.1 Product identifier

Trade name: Diverclean Hypochlorite

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

Identified uses:

For professional and industrial use only.

AISE-P801 - Food process cleaner. Cleaning In place (CIP) process

Uses advised against: Uses other than those identified are not recommended

1.3 Details of the supplier of the safety data sheet

Diversey Europe Operations BV, Maarssenbroeksedijk 2, 3542DN Utrecht, The Netherlands

Contact details

Diversey Ltd

Weston Favell Centre, Northampton NN3 8PD, United Kingdom

Tel: 01604 405311, Fax: 01604 406809

Regulatory Email: customerservice.uk@diversey.com

1.4 Emergency telephone number

For medical or environmental emergency only:

call 0800 052 0185

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

EUH031

Skin Corr. 1B (H314) Aquatic Acute 1 (H400) Aquatic Chronic 2 (H411) Met. Corr. 1 (H290)

2.2 Label elements





Contains sodium hypochlorite (Sodium Hypochlorite).

Hazard statements:

EUH031 - Contact with acids liberates toxic gas.

H314 - Causes severe skin burns and eye damage.

H410 - Very toxic to aquatic life with long lasting effects.

H290 - May be corrosive to metals.

Precautionary statements:

P260 - Do not breathe vapours.

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

P303 + P361 + P353 - IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.

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

Continue rinsing.

P310 - Immediately call a POISON CENTRE, doctor or physician.

2.3 Other hazards

No other hazards known

SECTION 3: Composition/information on ingredients

3.2 Mixtures

| Ingredient(s) | EC number | CAS number | REACH number | Classification | Notes | Weight percent |
|---------------------|-----------|------------|------------------|--|-------|----------------|
| sodium hypochlorite | 231-668-3 | 7681-52-9 | 01-2119488154-34 | EUH031 Skin Corr. 1B (H314) STOT SE 3 (H335) Aquatic Acute 1 (H400) Aquatic Chronic 1 (H410) Met. Corr. 1 (H290) | | 10-20 |

^{*} Polymer.

- 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.

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

SECTION 4: First aid measures

4.1 Description of first aid measures

If unconscious place in recovery position and seek medical advice. Provide fresh air. If breathing is General Information:

irregular or stopped, administer artificial respiration. No mouth-to-mouth or mouth-to-nose

resuscitation. Use Ambu bag or ventilator.

Inhalation: Get medical attention or advice if you feel unwell.

Wash skin with plenty of lukewarm, gently flowing water for at least 30 minutes. Take off Skin contact:

immediately all contaminated clothing and wash it before re-use. Immediately call a POISON

CENTRE, doctor or physician.

Hold eyelids apart and flush eyes with plenty of lukewarm water for at least 15 minutes. Remove Eye contact:

contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTRE,

doctor or physician.

Inaestion: Rinse mouth. Immediately drink 1 glass of water. Never give anything by mouth to an unconscious

person. Do NOT induce vomiting. Keep at rest. Immediately call a POISON CENTRE, doctor or

physician.

Self-protection of first aider: Consider personal protective equipment as indicated in subsection 8.2.

4.2 Most important symptoms and effects, both acute and delayed

Inhalation: May cause bronchospasm in chlorine sensitive individuals.

Causes severe burns. Skin contact:

Eye contact: Causes severe or permanent damage.

Ingestion will lead to a strong caustic effect on mouth and throat and to the danger of perforation of Ingestion:

oesophagus and stomach.

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

Ensure adequate ventilation. Do not breathe dust or vapour. In case of an incident in a confined area wear suitable respiratory protection. 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). Ensure adequate ventilation.

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. Do not mix with other products unless adviced by Diversey. 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. Wash contaminated clothing before reuse. Use personal protective equipment as required. Avoid contact with skin and eyes. Do not breathe vapours. Use only with adequate ventilation. See chapter 8.2, Exposure controls / Personal protection.

7.2 Conditions for safe storage, including any incompatibilities

Store in accordance with local and national regulations. Store in a closed container. Keep only in original packaging. 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:

Biological limit values, if available:

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

DNEL/DMEL and PNEC values

Human exposure

| DNEL ora | l exposure - | Consumer | (mg/ | kg | bw) | |
|----------|--------------|------------------------------|------|----|-----|--|
| | | | | | | |

| Ingredient(s) | Short term - Local effects | Short term - Systemic effects | Long term - Local effects | Long term - Systemic effects |
|---------------------|----------------------------|-------------------------------|---------------------------|------------------------------|
| sodium hypochlorite | - | - | - | 0.26 |

DNEL dermal exposure - Worker

| Ingredient(s) | Short term - Local effects | Short term - Systemic effects (mg/kg bw) | Long term - Local effects | Long term - Systemic effects (mg/kg bw) |
|---------------------|----------------------------|--|---------------------------|---|
| sodium hypochlorite | - | - | 0.5 % | - |

DNEL dermal exposure - Consumer

| Ingredient(s) | Short term - Local effects | Short term - Systemic effects (mg/kg bw) | Long term - Local effects | Long term - Systemic effects (mg/kg bw) |
|---------------------|----------------------------|--|---------------------------|---|
| sodium hypochlorite | - | - | 0.5 % | - |

DNEL inhalatory exposure - Worker (mg/m³)

| Ingredient(s) | Short term - Local effects | Short term - Systemic effects | Long term - Local effects | Long term - Systemic effects |
|---------------------|----------------------------|-------------------------------|---------------------------|------------------------------|
| sodium hypochlorite | 3.1 | 3.1 | 1.55 | 1.55 |

DNEL inhalatory exposure - Consumer (mg/m³)

| Ingredient(s) | Short term - Local effects | Short term - Systemic effects | Long term - Local effects | Long term - Systemic effects |
|---------------------|----------------------------|-------------------------------|---------------------------|------------------------------|
| sodium hypochlorite | 3.1 | 3.1 | 1.55 | 1.55 |

Environmental exposure

Environmental exposure - PNEC

| Ingredient(s) | Surface water, fresh (mg/l) | Surface water, marine (mg/l) | Intermittent (mg/l) | Sewage treatment plant (mg/l) |
|---------------------|-----------------------------|------------------------------|---------------------|-------------------------------|
| sodium hypochlorite | 0.00021 | 0.000042 | 0.00026 | 0.03 |

Environmental exposure - PNEC, continued

| Ingredient(s) | Sediment, freshwater | Sediment, marine | Soil (mg/kg) | Air (mg/m³) |
|---------------|----------------------|------------------|--------------|-------------|
|---------------|----------------------|------------------|--------------|-------------|

| | (mg/kg) | (mg/kg) | | |
|---------------------|---------|---------|---|---------|
| sodium hypochlorite | - | - | - | 0.00026 |

8.2 Exposure controls

The following information applies for the uses indicated in subsection 1.2 of the Safety Data Sheet. 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 undiluted product:

Covering activities such as filling and transfer of product to application equipment, flasks or buckets

If the product is diluted by using specific dosing systems with no risk of splashes or direct skin Appropriate engineering controls:

contact, the personal protection equipment as described in this section is not required.

Appropriate organisational controls: Avoid direct contact and/or splashes where possible. Train personnel.

Personal protective equipment

Eye / face protection: Safety glasses or goggles (EN 166). The use of a full-face shield or other full-face protection is

strongly recommended when handling open containers or if splashes may occur.

Chemical-resistant protective gloves (EN 374). Verify instructions regarding permeability and Hand protection:

breakthrough time, as provided by the gloves supplier. Consider specific local use conditions, such

as risk of splashes, cuts, contact time and temperature.

Suggested gloves for prolonged contact: Material: butyl rubber Penetration time: ≥ 480 min Material

thickness: ≥ 0.7 mm Suggested gloves for protection against splashes: 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 (EN 14605).

Respiratory protection: Respiratory protection is not normally required. However, inhalation of vapour, spray, gas or

aerosols should be avoided.

Environmental exposure controls: Should not reach sewage water or drainage ditch undiluted.

Recommended safety measures for handling the diluted product:

Recommended maximum concentration (%): 2

No special requirements under normal use conditions. Appropriate engineering controls: Appropriate organisational controls: No special requirements under normal use conditions.

Personal protective equipment

No special requirements under normal use conditions. Eye / face protection: Hand protection: No special requirements under normal use conditions. No special requirements under normal use conditions. **Body protection:** 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, Pale Green

Odour: Chlorine

Odour threshold: Not applicable

pH: > 11 (neat) ISO 4316 ISO 4316

Not relevant to classification of this product Melting point/freezing point (°C): Not determined

Initial boiling point and boiling range (°C): See substance data

Substance data, boiling point

Flash point (°C): >

| Ingredient(s) | Value (°C) | Method | Atmospheric pressure (hPa) |
|---------------------|--------------------|------------------|----------------------------|
| sodium hypochlorite | Product decomposes | Method not given | 1013 |
| | before boiling | | |

Method / remark

Weight of evidence

Sustained combustion: Not applicable.

(UN Manual of Tests and Criteria, section 32, L.2)

Evaporation rate: Not relevant for classification of this product.

Flammability (solid, gas): Not applicable to liquids Upper/lower flammability limit (%): Not determined Not relevant to classification of this product

See substance data

Substance data, flammability or explosive limits, if available:

| Ingredient(s) | Lower limit (% vol) | Upper limit (% vol) |
|---------------------|------------------------|------------------------|
| sodium hypochlorite | - | - |

Method / remark

See substance data

Vapour pressure: See substance data.

| Substance data, vapour pressure | | | |
|---------------------------------|---------------|------------------|---------------------|
| Ingredient(s) | Value (Pa) | Method | Temperature (°C) |
| sodium hypochlorite | 1700 | Method not given | 20 |

Method / remark

Not relevant to classification of this product

OECD 109 (EU A.3)

Relative density: ≈ 1.18 (20 °C) Solubility in / Miscibility with Water: Fully miscible

Vapour density: Not determined

Substance data, solubility in water

| Ingredient(s) | Value (g/l) | Method | Temperature (°C) |
|---------------------|----------------|--------|---------------------|
| sodium hypochlorite | Soluble | | |

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

Method / remark

Autoignition temperature: Not determined **Decomposition temperature:** Not applicable.

Viscosity: Not determined (20 °C) Explosive properties: Not explosive. Oxidising properties: Not oxidising. Not relevant to classification of this product

9.2 Other information

Surface tension (N/m): Not determined Corrosion to metals: Corrosive

OECD 115

Weight of evidence

Substance data, dissociation constant, if available:

| Ingredient(s) | Value | Method | Temperature (°C) |
|---------------------|------------|------------------|---------------------|
| sodium hypochlorite | 7.53 (pKa) | Method not given | |

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 acids releasing toxic chlorine gas. Keep away from acids.

10.6 Hazardous decomposition products

Chlorine.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Mixture data:.

Relevant calculated ATE(s):

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

| Acute | toxicity |
|-------|----------|
|-------|----------|

| Acute oral toxicity | | | | | | |
|---------------------|----------|------------------|---------|--------|-------------------|--|
| Ingredient(s) | Endpoint | Value (mg/kg) | Species | Method | Exposure time (h) | |
| sodium hypochlorite | LD 50 | > 1100 | Rat | | 90 | |

Acute dermal toxicity

| Ingredient(s) | Endpoint | Value (mg/kg) | Species | Method | Exposure time (h) |
|---------------------|----------|------------------|---------|-------------------|-------------------|
| sodium hypochlorite | LD 50 | > 20000 | Rabbit | OECD 402 (EU B.3) | |

Acute inhalative toxicity

| Ingredient(s) | Endpoint | Value (mg/l) | Species | Method | Exposure time (h) |
|---------------------|----------|-----------------|---------|-------------------|-------------------|
| sodium hypochlorite | LC 50 | > 10.5 (vapour) | Rat | OECD 403 (EU B.2) | 1 |

Irritation and corrosivity Skin irritation and corrosivity

| Ingredient(s) | Result | Species | Method | Exposure time |
|---------------------|-----------|---------|-------------------|---------------|
| sodium hypochlorite | Corrosive | Rabbit | OECD 404 (EU B.4) | |

Eye irritation and corrosivity

| Ingredient(s) | Result | Species | Method | Exposure time |
|---------------------|---------------|---------|-------------------|---------------|
| sodium hypochlorite | Severe damage | Rabbit | OECD 405 (EU B.5) | |

Respiratory tract irritation and corrosivity

| Ingredient(s) | Result | Species | Method | Exposure time |
|---------------------|-------------------|---------|--------|---------------|
| sodium hypochlorite | Irritating to | | | |
| | respiratory tract | | | |

Sensitisation

Sensitisation by skin contact

| Ingredient(s) | Result | Species | Method | Exposure time (h) |
|---------------------|-----------------|------------|---------------------|-------------------|
| sodium hypochlorite | Not sensitising | Guinea pig | OECD 406 (EU B.6) / | |
| · | Ī | | Buehler test | |

Sensitisation by inhalation

| Ingredient(s) | Result | Species | Method | Exposure time |
|---------------------|-------------------|---------|--------|---------------|
| sodium hypochlorite | No data available | | | |

CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)

| Ingredient(s) | Result (in-vitro) | Method | Result (in-vivo) | Method |
|---------------------|------------------------------|--------------|--|--------------|
| | | (in-vitro) | | (in-vivo) |
| sodium hypochlorite | No evidence for mutagenicity | OECD 471 (EU | No evidence for mutagenicity, negative | OECD 474 (EU |
| | | B.12/13) | test results | B.12) |

Carcinogenicity

| Ingredient(s) | Effect |
|---------------------|--|
| sodium hypochlorite | No evidence for carcinogenicity, negative test results |

Toxicity for reproduction

| Ingredient(s) | Endpoint | Specific effect | Value | Species | Method | Exposure | Remarks and other effects |
|---------------------|----------|---------------------------------|--------------|---------|-------------|----------|------------------------------|
| | | | (mg/kg bw/d) | | | time | reported |
| sodium hypochlorite | NOAEL | Developmental toxicity Impaired | 5 (CI) | Rat | OECD 414 | | No evidence for reproductive |
| | | fertility | | | (EU B.31), | | toxicity |
| | | | | | oral OECD | | _ |
| | | | | | 415 (EU | | |
| | | | | | B.34), oral | | |

Repeated dose toxicity

| Sub-acute of sub-chronic oral toxicity | | | | | | |
|--|----------|--------------|---------|--------------|-------------|-----------------------------|
| Ingredient(s) | Endpoint | Value | Species | Method | Exposure | Specific effects and organs |
| | | (mg/kg bw/d) | | | time (days) | affected |
| sodium hypochlorite | NOAEL | 50 | Rat | OECD 408 (EU | 90 | |
| | | | | B.26) | | |

Sub-chronic dermal toxicity

| Ingredient(s) | Endpoint | Value (mg/kg bw/d) | Species | Method | Exposure time (days) | Specific effects and organs affected |
|---------------------|----------|-----------------------|---------|--------|----------------------|--------------------------------------|
| sodium hypochlorite | | No data available | | | | |

Sub-chronic inhalation toxicity

| Ingredient(s) | Endpoint | Value (mg/kg bw/d) | Species | Method | Exposure time (days) | Specific effects and organs affected |
|---------------------|----------|-----------------------|---------|--------|----------------------|--------------------------------------|
| sodium hypochlorite | | No data | | | | |
| | | available | | | | |

Chronic toxicity

| Ingredient(s) | Exposure route | Endpoint | Value (mg/kg bw/d) | Species | Method | Exposure time | Specific effects and organs affected | Remark |
|---------------------|----------------|----------|-----------------------|---------|--------|---------------|---|--------|
| sodium hypochlorite | | | No data available | | | | | |

STOT-single exposure

| Ingredient(s) | Affected organ(s) |
|---------------------|-------------------|
| sodium hypochlorite | Not applicable |

STOT-repeated exposure

| Ingredient(s) | Affected organ(s) |
|---------------------|-------------------|
| sodium hypochlorite | Not applicable |

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

| ĺ | Ingredient(s) | Endpoint | Value (mg/l) | Species | Method | Exposure time (h) |
|---|---------------------|----------|-----------------|--------------|------------------|-------------------|
| | sodium hypochlorite | LC 50 | 0.06 | Oncorhynchus | Method not given | 96 |
| | | | | mykiss | | |

Aquatic short-term toxicity - crustacea

| Ingredient(s) | Endpoint | Value (mg/l) | Species | Method | Exposure time (h) |
|---------------------|----------|-----------------|-----------------------|-------------------|-------------------|
| sodium hypochlorite | EC 50 | 0.035 | Ceriodaphnia dubia | OECD 202 (EU C.2) | 48 |

Aquatic short-term toxicity - algae

| Ingredient(s) | Endpoint | Value (mg/l) | Species | Method | Exposure time (h) |
|---------------------|----------|-----------------|---------------|------------------|-------------------|
| sodium hypochlorite | NOEC | 0.0021 | Not specified | Method not given | 168 |

Aquatic short-term toxicity - marine species

| Ingredient(s) | Endpoint | Value (mg/l) | Species | Method | Exposure time (days) |
|---------------------|----------|-----------------|-------------|------------------|----------------------|
| sodium hypochlorite | EC 50 | 0.026 | Crassostrea | Method not given | 2 |
| | | | virginica | | |

Impact on sewage plants - toxicity to bacteria

| Ingredient(s) | Endpoint | Value (mg/l) | Inoculum | Method | Exposure time |
|---------------------|----------|-----------------|------------------|------------------|---------------|
| sodium hypochlorite | | 0.375 | Activated sludge | Method not given | |

Aquatic long-term toxicity

Aquatic long-term toxicity - fish Value Effects observed Ingredient(s) Endpoint Method Exposure Species (mg/l)time sodium hypochlorite NOEC 0.04 Menidia Method not 96 hour(s) pelinsulae given

Aquatic long-term toxicity - crustacea

| Ingredient(s) | Endpoint | Value (mg/l) | Species | Method | Exposure time | Effects observed |
|---------------------|----------|-----------------|---------|--------|---------------|------------------|
| sodium hypochlorite | | No data | | | | |

| | | available | | | | |
|--|----------|-----------------------------------|------------------------------|--------|----------------------|------------------|
| | | | | | | |
| atic toxicity to other aquatic benthic organism Ingredient(s) | | t-dwelling organis Value | sms, if available Species | Method | Exposure | Effects observed |
| ingredient(s) | Endpoint | (mg/kg dw sediment) | Species | Wethod | time (days) | Effects observed |
| sodium hypochlorite | | No data available | | | - | |
| restrial toxicity | | | | | | |
| estrial toxicity - soil invertebrates, including of Ingredient(s) | Endpoint | e: Value (mg/kg dw soil) | Species | Method | Exposure time (days) | Effects observed |
| sodium hypochlorite | | No data available | | | - | |
| estrial toxicity - plants, if available: | | | | | | |
| Ingredient(s) | Endpoint | Value (mg/kg dw soil) | Species | Method | Exposure time (days) | Effects observed |
| sodium hypochlorite | | No data available | | | - | |
| restrial toxicity - birds, if available: | | | | | | |
| Ingredient(s) | Endpoint | Value | Species | Method | Exposure time (days) | Effects observed |
| sodium hypochlorite | | No data available | | | | |
| restrial toxicity - beneficial insects, if available | | | | | | |
| Ingredient(s) | Endpoint | Value (mg/kg dw soil) | Species | Method | Exposure time (days) | Effects observed |
| sodium hypochlorite | | No data available | | | - | |
| restrial toxicity - soil bacteria, if available: | | | | | | |
| Ingredient(s) | Endpoint | Value (mg/kg dw soil) | Species | Method | Exposure time (days) | Effects observed |
| sodium hypochlorite | | No data | | | - | |

12.2 Persistence and degradability

Abiotic degradation
Abiotic degradation - photodegradation in air, if available:

| Tibiotio dogradation priotodogradation in anj il availabion | | | | | | | |
|---|---------------------|----------------|--------------------------|------------|--------|--|--|
| | Ingredient(s) | Half-life time | Method | Evaluation | Remark | | |
| | sodium hypochlorite | 115 day(s) | Indirect photo-oxidation | | | | |

available

Abiotic degradation - hydrolysis, if available:

Abiotic degradation - other processes, if available:

BiodegradationReady biodegradability - aerobic conditions

| Ingredient(s) | Inoculum | Analytical method | DT 50 | Method | Evaluation |
|---------------------|----------|-------------------|-------|--------|--------------------------------------|
| sodium hypochlorite | | | | | Not applicable (inorganic substance) |

Ready biodegradability - anaerobic and marine conditions, if available:

Degradation in relevant environmental compartments, if available:

12.3 Bioaccumulative potential
Partition coefficient n-octanol/water (log Kow)

| Ingredient(s) | Value | Method | Evaluation | Remark |
|---------------------|-------|------------------|-----------------------------|--------|
| sodium hypochlorite | -3.42 | Method not given | No bioaccumulation expected | |

Bioconcentration factor (BCF)

| Ingredient(s) | Value | Species | Method | Evaluation | Remark |
|---------------------|-------------------|---------|--------|------------|--------|
| sodium hypochlorite | No data available | | | | |

12.4 Mobility in soil

| Adsorption besorption to soil or sediment | | | | | | | |
|---|-------------|-------------|--------|---------------|------------|--|--|
| Ingredient(s) | Adsorption | Desorption | Method | Soil/sediment | Evaluation | | |
| | coefficient | coefficient | | type | | | |

| | Log Koc | Log Koc(des) | | |
|---------------------|---------|--------------|--|-------------------------------------|
| sodium hypochlorite | 1.12 | | | High potential for mobility in soil |

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

products:

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.

European Waste Catalogue: 20 01 15* - alkalines.

Empty packaging

Recommendation: Dispose of observing national or local regulations.

Suitable cleaning agents: Water, if necessary with cleaning agent.

SECTION 14: Transport information



Land transport (ADR/RID), Sea transport (IMDG), Air transport (ICAO-TI / IATA-DGR)

14.1 UN number: 1791

14.2 UN proper shipping name:

Hypochlorite solution

14.3 Transport hazard class(es):

Transport hazard class (and subsidiary risks): 8

14.4 Packing group: II

14.5 Environmental hazards:

Environmentally hazardous: Yes

Marine pollutant: Yes

14.6 Special precautions for user: None known.

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

Other relevant information:

ADR

Classification code: C9
Tunnel restriction code: E
Hazard identification number: 80

IMO/IMDG

EmS: F-A, S-B

The product has been classified, labelled and packaged in accordance with the requirements of ADR and the provisions of the IMDG Code Transport regulations include special provisions for certain classes of dangerous goods packed in limited quantities.

SECTION 15: Regulatory information

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

EU regulations:

- Regulation (EC) No. 1907/2006 REACH
- Regulation (EC) No 1272/2008 CLP
- Regulation (EC) No. 648/2004 Detergents regulation

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

Ingredients according to EC Detergents Regulation 648/2004

chlorine-based bleaching agents 5 - 15 %

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

Revision: 2018-03-05 **SDS code:** MS1003453 Version: 02.0

Reason for revision:

This data sheet contains changes from the previous version in section(s):, Name change, 1, 16

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 H and EUH phrases mentioned in section 3:

- H290 May be corrosive to metals.H314 Causes severe skin burns and eye damage.
- H318 Causes serious eye damage.
- · H335 May cause respiratory irritation.
- H400 Very toxic to aquatic life.
- H410 Very toxic to aquatic life with long lasting effects.
- EUH031 Contact with acids liberates toxic gas.

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
- LD50 Lethal Dose, 50% / Median Lethal dose
- LC50 Lethal Concentration, 50% / Median Lethal Concentration
- EC50 effective concentration, 50%
- NOEL No observed effect level
- NOAEL No observed adverse effect level
- OECD Organization for Economic Cooperation and Development

End of Safety Data Sheet