

SAFETY DATA SHEET according to Regulation (EC) No. 1907/2006

CHAMPION POOLSIDE DEEP CLEAN

Version 4.0

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

1.1. Product identifier CHAMPION POOLSIDE DEEP CLEAN Trade name 1.2. Relevant identified uses of the substance or mixture and uses advised against Use of the De-liming agent., industrial cleaning agent, rust remover 5 Substance/Mixture Uses advised against : At this moment we have not identified any uses advised against Details of the supplier of the safety data sheet 1.3. Company **Brenntag UK Limited** 5 Alpha House, Lawnswood Business Park GB LS16 6QY Leeds Telephone +44 (0) 113 3879 200 : Telefax +44 (0) 113 3879 280 : E-mail address : msds@brenntag.co.uk **Emergency telephone number** 1.4. Emergency telephone Emergency only telephone number (open 24 hours): number +44 (0) 1865 407333 (N.C.E.C. Culham) **SECTION 2: Hazards identification** 2.1. Classification of the substance or mixture Classification according to Regulation S.I. 2019/720 (GB CLP) Regulation S.I. 2019/720 (GB CLP) Hazard **Hazard class** Hazard category **Target Organs** statements Corrosive to metals Category 1 H290 ---Acute toxicity (Oral) Category 4 ---H302 Skin corrosion Category 1 H314 ---

For the full text of the H-Statements mentioned in this Section, see Section 16.

Category 1

R59679

Serious eye damage

H318

| Most important adverse | ene | 515 | |
|---------------------------------|------|---|--|
| Human Health | : | See section 11 for | or toxicological information. |
| Physical and chemical hazards | : | See section 9/10 | for physicochemical information. |
| Potential environmental effects | : | See section 12 fo | or environmental information. |
| Label elements | | | |
| Labelling according to | Reg | ulation S.I. 2019/7 | 720 (GB CLP) |
| Hazard symbols | : | | ! |
| Signal word | : | Danger | |
| Hazard statements | : | H290 H302 H314 | May be corrosive to metals. Harmful if swallowed. Causes severe skin burns and eye damage |
| Precautionary statements | | | |
| Prevention | : | P280 | Wear protective gloves/ protective clothing/ eye protection/ face protection/ hearing protection. |
| Response | : | P301 + P330 + P P303 + P361 + P P304 + P340 + P | NOT induce vomiting. 2353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water. |
| | | | air and keep comfortable for breathing. Immediately call a POISON CENTER/ doctor. |
| | | P305 + P351 + P | V338 + 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. |
| | | P390 | Absorb spillage to prevent material damage. |
| Hazardous components | whic | ch must be listed | on the label: |
| phosphoric acid | | | |



formic acid

Alcohols, C12-14, ethoxylated

• Alcohols, C9-11-iso-, C10-rich, ethoxylated (>2.5-5 EO)

2.3. Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher. This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

Ecological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher. The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Delegated regulation (EU) 2018/605 at levels of 0.1% or higher.

Toxicological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Delegated regulation (EU) 2018/605 at levels of 0.1% or higher.

SECTION 3: Composition/information on ingredients

3.2. Mixtures

| | | Classif (Regulation S.I. 20 | |
|--|--------------|--|------------------------------|
| Hazardous components | Amount [%] | Hazard class / Hazard category | Hazard statements |
| phosphoric acid | | | |
| Index-No. : 015-011-00-6 CAS-No. : 7664-38-2 EC-No. : 231-633-2 EU REACH- : 01-2119485924-24-xxxx Reg. No. | > 50 - < 100 | Met. Corr.1 Acute Tox.4 Oral Skin Corr.1B Eye Dam.1 specific concentration limit Skin Irrit. 2; H315 10 - < 25 % Eye Irrit. 2; H319 10 - < 25 % Skin Corr. 1B; H314 >= 25 % Acute toxicity estimate Acute oral toxicity: 500 mg/kg Acute dermal toxicity: 2740 mg/kg | H290 H302 H314 H318 |

| formic acid | | | | |
|--------------------------------|--|---------------------|--|----------------------|
| Index-No. CAS-No. EC-No. | : 607-001-00-0 : 64-18-6 : 200-579-1 | > 2.5 - < 10 | Acute Tox.4 Oral Skin Corr.1A specific concentration limit Skin Corr. 1A; H314 >= 90 % Skin Corr. 1B; H314 10 - < 90 % Eye Irrit. 2; H319 2 - < 10 % Skin Irrit. 2; H315 2 - < 10 % Acute toxicity estimate Acute oral toxicity: 1200 mg/kg Note B | H302 H314 |
| Alcohols, C1 | 2-14, ethoxylated | | | |
| CAS-No. EC-No. | : 68439-50-9 : 931-838-3 | > 0.1 - < 2.5 | Acute Tox.4 Oral Eye Dam.1 Aquatic Chronic3 Acute toxicity estimate Acute oral toxicity: 300 mg/kg | H302 H318 H412 |
| Alcohols, CS | 9-11-iso-, C10-rich, etho | xylated (>2.5-5 EO) | | |
| CAS-No. | : 78330-20-8 | > 0.1 - < 2.5 | Eye Dam.1 | H318 |

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For the full text of the H-Statements mentioned in this Section, see Section 16. For the full text of the Notes mentioned in this Section, see Section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

| General advice | : Take off all contaminated clothing immediately. Effects may be delayed. Keep affected person under observation. | |
|-------------------------|--|----|
| If inhaled | : In case of accident by inhalation: remove casualty to fresh air and keep at rest. If breathing is irregular or stopped, administer artificial respiration. Call a physician immediately. | |
| In case of skin contact | : Wash off immediately with soap and plenty of water. Call a physician immediately. | |
| In case of eye contact | : Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Consult an eye specialist immediately. Go to an ophthalmic hospital if possible. | |
| If swallowed | : Clean mouth with water and drink afterwards plenty of water. Never give anything by mouth to an unconscious person. Do | |
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| | | NOT induce vomiting. Call a physician immediately. | |
|---|--|--|--|
| 4.2. Most important symptoms and effects, both acute and delayed | | | |
| | Symptoms | : See Section 11 for more detailed information on health effects and symptoms. | |
| | Effects | : See Section 11 for more detailed information on health effects and symptoms. | |
| 4.3. Indication of any immediate medical attention and special treatment needed | | te medical attention and special treatment needed | |
| | Treatment | : Treat symptomatically.For specialist advice physicians should contact the Poisons Information Service. | |
| SEC | TION 5: Firefighting meas | sures | |
| 5.1. | Extinguishing media | | |
| | Suitable extinguishing media | : Carbon dioxide (CO2), extinguishing powder, Water jet. | |
| | Unsuitable extinguishing media | : No information available. | |
| 5.2. Special hazards arising from the substance or mixture | | om the substance or mixture | |
| | Specific hazards during | : Toxic gases/vapors | |
| | firefighting Hazardous combustion products | : Carbon monoxide, Carbon dioxide (CO2), Nitrogen oxides (NOx) | |
| 5.3. | Advice for firefighters | | |
| | Special protective equipment for firefighters | In the event of fire, wear self-contained breathing apparatus.Wear appropriate body protection (full protective suit) | |
| | Specific extinguishing methods | : Control smoke with water spray. | |
| | Further advice | : Collect contaminated fire extinguishing water separately. This must not be discharged into drains. | |
| 050 | | | |
| | TION 6: Accidental releas | | |
| 6.1. | Personal precautions, pro | tective equipment and emergency procedures | |
| | Personal precautions | : Keep away unprotected persons. Use personal protective equipment. Ensure adequate ventilation. Avoid contact with the skin and the eyes. Do not breathe vapours or spray mist. | |

6.2. Environmental precautions

| Environmental | : Do not flush into surface water or sanitary sewer system. | |
|----------------------|---|----|
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| | precautions | Avoid subsoil penetration. | |
|------|--|--|----|
| 6.3. | Methods and materials for | containment and cleaning up | |
| | Methods and materials for containment and cleaning up | : Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders). Use neutralizing agents. Keep in suitable, closed containers for disposal. | |
| | Further information | : Treat recovered material as described in the section "Disposal considerations". | |
| 6.4. | Reference to other section | S | |
| | See Section 1 for emergent See Section 8 for information See Section 13 for waste tr | on on personal protective equipment. | |
| SEC | TION 7: Handling and sto | rage | |
| 7.1. | Precautions for safe hand | ing | |
| | Advice on safe handling | : Keep container tightly closed. Ensure adequate ventilation. Use personal protective equipment. Avoid contact with skin, eyes and clothing. Do not breathe vapours or spray mist. Use respirator with appropriate filter if vapours or aerosol are released. When diluting, always add the product to water. Never add water to the product. Emergency eye wash fountains and emergency showers should be available in the immediate vicinity. | |
| | Hygiene measures | : Keep away from food, drink and animal feedingstuffs. Smoking, eating and drinking should be prohibited in the application area. Wash hands before breaks and at the end of workday. Take off all contaminated clothing immediately. | |
| 7.2. | Conditions for safe storage | e, including any incompatibilities | |
| | Requirements for storage areas and containers | : Store in original container. Keep in an area equipped with acid resistant flooring. | |
| | Advice on protection against fire and explosion | : Normal measures for preventive fire protection. | |
| | Further information on storage conditions | : Keep tightly closed in a dry and cool place. Keep in a well- ventilated place. Store away from reducing agents. Protect from frost. | |
| | Advice on common storage | : Keep away from food, drink and animal feedingstuffs. | |
| | Suitable packaging materials | : Plastics | |
| 7.3. | Specific end use(s) | | |
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Specific use(s)

: No information available.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

| component: phosphoric acid | CAS-No. 7664-38-2 | | | | | | |
|--|--------------------|--|--|--|--|--|--|
| Derived No Effect Level (DNEL)/Derived Minimal Effect Level (DMEL) | | | | | | | |
| DNEL Workers, Acute - local effects, Inhalation | : 2 mg/m3 | | | | | | |
| DNEL Workers, Long-term - local effects, Inhalation | : 1 mg/m3 | | | | | | |
| DNEL Workers, Long-term - systemic effects, Inhalation | : 10.7 mg/m3 | | | | | | |
| DNEL Consumers, Long-term - local effects, Inhalation | : 0.36 mg/m3 | | | | | | |
| DNEL Consumers, Long-term - systemic effects, Inhalation | : 4.57 mg/m3 | | | | | | |
| DNEL Consumers, Long-term - systemic effects, Skin contact | : 0.1 mg/kg bw/day | | | | | | |
| Predicted No Effect Concentratio | n (PNEC) | | | | | | |
| No PNEC value was derived. | | | | | | | |
| Other Occupational Exposure Lin | nit Values | | | | | | |
| UK. EH40 Workplace Exposure Limits (WELs), as amended, Time Weighted Average (TWA): 1 mg/m3 | | | | | | | |
| EU. Indicative Occupational Exposure Limit Values in Directives 91/322/EEC, 2000/39/EC, 2006/15/EC, 2009/161/EU, 2017/164/EU, as amended, Time Weighted Average (TWA): | | | | | | | |

EU. Indicative Occupational Exposure Limit Values in Directives 91/322/EEC, 2000/39/EC, 2006/15/EC, 2009/161/EU, 2017/164/EU, as amended, Short Term Exposure Limit (STEL): 2 mg/m3 Indicative

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1 mg/m3 Indicative



UK. EH40 Workplace Exposure Limits (WELs), as amended, Short Term Exposure Limit (STEL):

2 mg/m3, (15 minutes)

ELV (IE), Time Weighted Average (TWA): 1 mg/m3 Indicative OELV

ELV (IE), Short Term Exposure Limit (STEL): 2 mg/m3, (15 minutes) Indicative OELV

Component:

formic acid

CAS-No. 64-18-6

Other Occupational Exposure Limit Values

UK. EH40 Workplace Exposure Limits (WELs), as amended, Time Weighted Average (TWA): 5 ppm, 9.6 mg/m3

EU. Indicative Occupational Exposure Limit Values in Directives 91/322/EEC, 2000/39/EC, 2006/15/EC, 2009/161/EU, 2017/164/EU, as amended, Time Weighted Average (TWA): 5 ppm, 9 mg/m3 Indicative

ELV (IE), Time Weighted Average (TWA): 5 ppm, 9 mg/m3 Indicative OELV

8.2. Exposure controls

Appropriate engineering controls

Refer to protective measures listed in sections 7 and 8.

Personal protective equipment

Respiratory protection

| Advice | : | In case of brief exposure or low pollution use breathing filter apparatus. Respiratory protection complying with EN 141. In case of intensive or longer exposure use self-contained breathing apparatus. | |
|----------------------|---|--|----|
| Hand protection | | | |
| Advice | : | Protective gloves complying with EN 374. Please observe the instructions regarding permeability and breakthrough time which are provided by the supplier of the gloves. | |
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| | Also take into consideration the encodie local constitutions we don |
|--------------------|---|
| | Also take into consideration the specific local conditions under which the product is used, such as the danger of cuts, abrasion, and the contact time. Protective gloves should be replaced at first signs of wear. |
| Material | : Rubber gloves |
| Eye protection | |
| Advice | : Tightly fitting safety goggles |
| Skin and body prot | ection |
| Advice | : Impervious clothing Chemical resistant apron |
| Environmental expo | osure controls |
| General advice | : Do not flush into surface water or sanitary sewer system. Avoid subsoil penetration. |

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

| Form | : liquid |
|---|---------------------|
| Physical state | : liquid |
| Colour | : light yellow |
| Odour | : characteristic |
| Odour Threshold | : No data available |
| Freezing point | : No data available |
| Initial boiling point and boiling range | : > 100 °C |
| Flammability | : No data available |
| Upper explosion limit / Upper flammability limit | : 47 %(V) |
| Lower explosion limit / Lower flammability limit | : 15 %(V) |
| Flash point | : No data available |
| Auto-ignition temperature | : 500 °C |
| Decomposition temperature | : No data available |
| | |

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| Self-Accelerating decomposition temperature (SADT) | : | No data available | |
|--|--------|---|----|
| рН | : | < 0 (20 °C) | |
| Viscosity Viscosity, dynamic | : | No data available | |
| Viscosity, kinematic | : | No data available | |
| Flow time | : | No data available | |
| Solubility(ies) Water solubility | : | completely miscible | |
| Solubility in other solvents | : | No data available | |
| Dissolution Rate | : | No data available | |
| Partition coefficient: n- octanol/water | : | No data available | |
| Dispersion Stability | : | No data available | |
| Vapour pressure | : | 28 hPa (20 °C) | |
| Relative density | : | No data available | |
| Density | : | 1.5 g/cm3 (20 °C) | |
| Bulk density | : | No data available | |
| Relative vapour density | : | No data available | |
| Particle characteristics No data available | | | |
| 9.2 Other information | | | |
| Explosives | : | Product is not explosive. | |
| SECTION 10: Stability and rea | ctiv | ity | |
| 10.1. Reactivity | | | |
| Advice | | he product reacts with water and generates heat. Sives off hydrogen by reaction with metals. | |
| 10.2. Chemical stability | | | |
| Advice | : S | table under recommended storage conditions. | |
| 10.3. Possibility of hazardous re | eactio | ons | |
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| | Hazardous reactions | : Reacts with: alkalis Amines Metal oxides | | |
|-------|---|--|--|--|
| 10.4. | Conditions to avoid | | | |
| | Conditions to avoid | : No information available. | | |
| 10.5. | Incompatible materials | | | |
| | Materials to avoid | : No information available. | | |
| 10.6. | Hazardous decomposition | products | | |
| | Hazardous decomposition : Irritant gases/vapours products | | | |
| | | | | |

SECTION 11: Toxicological information

11.1. Information on the hazard classes within the meaning of Regulation (EC) No. 1272/2008

| Data for the product | |
|-------------------------|---|
| | Acute toxicity |
| | Oral |
| Acute toxicity estimate | : 468.75 mg/kg) (Calculation method)Harmful if swallowed. |
| | Inhalation |
| Acute toxicity estimate | : > 20 mg/l (4 h; vapour) (Calculation method) |
| | Dermal |
| | No data available |
| | Irritation |
| | Skin |
| Result | : Causes severe skin burns and eye damage. |
| | Eyes |
| Result | : Causes serious eye damage. |
| | Sensitisation |
| | No data available |
| | CMR effects |
| | CMR Properties |
| | |
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|-----------------------|------------------------------------|------------------|
| | IDE DEEP CLEAN | |
| | | |
| Carcinogenicity | : No data available | |
| Mutagenicity | : No data available | |
| Reproductive toxicity | : No data available | |
| | Specific Target Organ Toxicit | y |
| | Single exposure | |
| | No data available | |
| | Repeated exposure | |
| | No data available | |
| | Other toxic properties | |
| | Repeated dose toxicity | |
| | No data available | |
| | Aspiration hazard | |
| | No data available | |
| Component: | phosphoric acid | CAS-No. 7664-38- |
| | Acute toxicity Inhalation | |
| | | |
| | No valid data available. | |
| | Dermal | |
| LD50 | : 2740 mg/kg (Rabbit) | |
| | Irritation | |
| | Skin | |
| Result | : corrosive effects (Rabbit; 24 h) | |
| | Eyes | |
| Result | : corrosive effects (Rabbit) | |
| | Sensitisation | |
| | | |

| Result | : No data available |
|-----------------------|---|
| | CMR effects |
| | CMR Properties |
| Carcinogenicity | : It is not considered carcinogenic. |
| Mutagenicity | : In vitro tests did not show mutagenic effects |
| Teratogenicity | : Did not show teratogenic effects in animal experiments. |
| Reproductive toxicity | : Animal testing did not show any effects on fertility. |
| | Genotoxicity in vitro |
| Result | negative (Bacterial Reverse Mutation Test; Salmonella typhimurium; with and without metabolic activation) (OECD Test Guideline 471) negative (Bacterial Reverse Mutation Test; Escherichia coli; with |
| | and without metabolic activation) (OECD Test Guideline 471) negative (Chromosome aberration test in vitro; Human lymphocytes; with and without metabolic activation) (OECD Test |
| | Guideline 473) negative (In vitro gene mutation study in mammalian cells; mouse lymphoma cells; with and without metabolic activation) (OECD Te Guideline 476) |
| | Teratogenicity |
| NOAEL Maternal | : >= 410 mg/kg bw/day |
| NOAEL Develop. | : >= 410 mg/kg bw/day |
| | (Rat, wistar)(Oral; 4.1, 19.0, 88.3, 410.0 mg/kg)(OECD Test Guideline 414)No adverse effectsRead-across (Analogy) |
| | Reproductive toxicity |
| NOAEL F1 | : >= 500 mg/kg bw/day |
| | (Rat, Sprague-Dawley, male and female)(Oral; 0, 125, 250, 500 mg/kg bw/day)(OECD Test Guideline 422) |
| | Specific Target Organ Toxicity |
| | Single exposure |
| Remarks | : The substance or mixture is not classified as specific target organ toxicant, single exposure. |
| | Repeated exposure |

| Remarks | : The substance or mixture is not classified as specific target organ toxicant, repeated exposure. |
|---------------------|--|
| | Other toxic properties |
| | Repeated dose toxicity |
| NOAEL | : 250 mg/kg bw/day |
| II | (Rat)(Oral; 90-day) (OECD Test Guideline 422) |
| | Aspiration hazard |
| | Not applicable, |
| Component: | formic acid CAS-No. 64-18-6 |
| | Acute toxicity |
| | Inhalation |
| LC50 | : 7.4 mg/l (Rat; 4 h) |
| | Dermal |
| II | No data available |
| | Irritation |
| | Skin |
| Result | : corrosive effects |
| | Eyes |
| Result | : corrosive effects |
| | Sensitisation |
| Result | : not sensitizing (Buehler Test; Guinea pig) (OECD Test Guideline 406) |
| | CMR effects |
| | Carcinogenicity |
| NOAEL | : 2,000 (No negative effects., Rat, male and female; Test substance: |
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| | Potassium acetate)(Oral; 0, 50, 400, 2000 mg/kg bw/day)(OECD Test Guideline 453)Read-across (Analogy) |
|-------------------------------|---|
| | CMR Properties |
| Carcinogenicity | : Animal testing did not show any carcinogenic effects. Read-across (Analogy) |
| Mutagenicity | In vitro tests did not show mutagenic effects In vivo tests did not show mutagenic effects |
| Teratogenicity | Did not show teratogenic effects in animal experiments. Read-across (Analogy) |
| Reproductive toxicity | : Animal testing did not show any effects on fertility. |
| | Genotoxicity in vitro |
| Result | negative (sister chromatid exchange assay; Human lymphocytes; no) (OECD Test Guideline 479) negative (Bacterial Reverse Mutation Test; Salmonella typhimurium; with and without metabolic activation) (OECD Test Guideline 471) negative (In vitro gene mutation study in mammalian cells; CHO (Chinese Hamster Ovary) cells; with and without metabolic activation) (OECD Test Guideline 476) negative (sister chromatid exchange assay; Chinese hamster fibroblasts; with and without metabolic activation) (OECD Test Guideline 479) |
| | Genotoxicity in vivo |
| Result | : negative (Sex-linked recessive lethal (SLRL) test; Drosophila melanogaster (vinegar fly), male) (Oral;) (OECD Test Guideline 477) |
| | Teratogenicity |
| NOAEL | : 1,000 mg/kg bw/day |
| Maternal NOAEL Toratog | : 1,000 mg/kg bw/day |
| Teratog. NOAEL Develop. | : 1,000 mg/kg bw/day |
| NOAEL Embryo-Fetal | : 1,000 mg/kg bw/day |
| | (Rabbit)(Oral; 0, 100, 300, 1000 mg/kg bw/day)(OECD Test Guideline 414)No adverse effectsRead-across (Analogy) |
| | Reproductive toxicity |
| NOAEL | : 1,000 mg/kg bw/day |
| Parent NOAEL | : 1,000 mg/kg bw/day |
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| F1 | (Two-generation reproductive toxicity; Rat, male and female) 0, 100, 300, 1000 mg/kg bw/day)(OECD Test Guideline 416) adverse effects | |
|---------------------|---|--------|
| | Specific Target Organ Toxicity | |
| | Single exposure | |
| Remarks | : No data available | |
| | Repeated exposure | |
| Remarks | : No data available | |
| | Other toxic properties | |
| | Aspiration hazard | |
| П | Not applicable, | |
| Component: | Alcohols, C12-14, ethoxylated CAS-No. 6843 | 9-50-9 |
| | Acute toxicity | |
| | Inhalation | |
| II | No data available | |
| | Dermal | |
| II | No data available | |
| | Irritation | |
| | Skin | |
| Result | : No data available | |
| | Eyes | |
| Result | : No data available | |
| | Sensitisation | |
| Result | : No data available | |
| | CMR effects | |
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| | | |

| | CMR Properties |
|-----------------------|--|
| Carcinogenicity | : No data available |
| Mutagenicity | : No data available |
| Reproductive toxicity | : No data available |
| | |
| | Specific Target Organ Toxicity |
| | Single exposure |
| Remarks | : No data available |
| | Repeated exposure |
| Remarks | : No data available |
| | Other toxic properties |
| | Aspiration hazard |
| 11 | No data available, |
| Component: Alco | hols, C9-11-iso-, C10-rich, ethoxylated CAS-No. 78330-20-8 (>2.5-5 EO) |
| | Acute toxicity |
| | Dermal |
| LD50 | > 2000 mg/kg (Rat) Information given is based on data obtained from similar substances. |
| II | from similar substances. |
| | Irritation |
| | Skin |
| Result | : No skin irritation (Rabbit) Information given is based on data obtained from similar substances. |
| | Eyes |
| Result | : Risk of serious damage to eyes. (Rabbit) Information given is based on data obtained from similar substances. |
| | Sensitisation |
| | : not sensitizing (Guinea pig) Information given is based on data |
| Result | obtained from similar substances. |

| CMR effects | | | |
|---------------------|--|--|--|
| CMR Properties | | | |
| Mutagenicity | : Ames test: negative Information given is based on data obtained from similar substances. | | |
| 2 Information on ot | har bazarda | | |

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11.2. Information on other hazards

| Data for the produc | :t | |
|---------------------|---|---|
| | Endocrine disrupting properti | ies |
| Assessment | to REACH Article 57(f) or Co (EU) 2017/2100 or Commiss levels of 0.1% or higher. : The substance/mixture does considered to have endocrim to REACH Article 57(f) or Co | ne disrupting properties according commission Delegated regulation sion Regulation (EU) 2018/605 at |
| Component: | phosphoric acid | CAS-No. 7664-38-2 |
| | Endocrine disrupting properti | ies |
| Assessment | : No information available abo for human health. | out endocrine disruption properties |
| Component: | formic acid | CAS-No. 64-18-6 |
| | Endocrine disrupting properti | ies |
| Assessment | : No information available abo for human health. | but endocrine disruption properties |
| Component: | Alcohols, C12-14, ethoxylated | CAS-No. 68439-50-9 |
| | Endocrine disrupting properti | ies |
| Assessment | to REACH Article 57(f) or Co | not contain components ne disrupting properties according commission Delegated regulation sion Regulation (EU) 2018/605 at |
| | linformation | |
| CTION 12: Ecologica | | |
| I. Toxicity | | |
| | | |
| Component: | phosphoric acid | CAS-No. 7664-38-2 |
| Component: | phosphoric acid | CAS-No. 7664-38-2 |



| | Acute toxicity |
|--------------|---|
| | Fish |
| LC50 | : 3 - 3.25 mg/l (Lepomis macrochirus; 96 h) |
| | Toxicity to daphnia and other aquatic invertebrates |
| EC50 | > 100 mg/l (Daphnia magna (Water flea); 48 h) (static test; OECD Test Guideline 202) |
| | algae |
| NOEC EC50 | 100 mg/l (Desmodesmus subspicatus; 72 h) (static test; End point: Growth rate; OECD Test Guideline 201) > 100 mg/l (Desmodesmus subspicatus; 72 h) (static test; End point: Growth rate; OECD Test Guideline 201) |
| | Bacteria |
| EC50 | : > 1000 mg/l (activated sludge; 3 h) (OECD Test Guideline 209) |
| Component: | formic acid CAS-No. 64-18-6 Acute toxicity |
| | Fish |
| LC50 | : 46 - 100 mg/l (Leuciscus idus (Golden orfe); 96 h) |
| | Toxicity to daphnia and other aquatic invertebrates |
| EC50 | : 120 mg/l (Daphnia magna (Water flea); 48 h) |
| | |
| | algae |
| EC50 | algae : 26.9 mg/l (Scenedesmus subspicatus; 72 h) |
| EC50 | - |
| | : 26.9 mg/l (Scenedesmus subspicatus; 72 h) |

| | Chronic toxicity | |
|------------|---|-------------------|
| | Aquatic invertebrates | |
| NOEC | >= 100 mg/l (Daphnia magna (Water flea); 21 c End point: Reproduction; OECD Test Guideline | 211) |
| Component: | Alcohols, C12-14, ethoxylated C | AS-No. 68439-50-9 |
| | Acute toxicity | |
| | Fish | |
| II | : No data available | |
| | Toxicity to daphnia and other aquatic invertebrates | |
| II | : No data available | |
| | algae | |
| II | : No data available | |
| | Chronic toxicity | |
| | Long-term (chronic) aquatic hazard | |
| Result | : Harmful to aquatic life with long lasting effects. | |
| Component: | Alcohols, C9-11-iso-, C10-rich, ethoxylated C (>2.5-5 EO) | AS-No. 78330-20-8 |
| | Acute toxicity | |
| | Fish | |
| LC50 | > 1 - 10 mg/l (Cyprinus carpio (Carp); 96 h) (OB 203)Information given is based on data obtaine substances. | |
| | Toxicity to daphnia and other aquatic invertebrates | |
| EC50 | > 1 - 10 mg/l (Daphnia magna (Water flea); 48 Guideline 202)Information given is based on da similar substances. | |
| | | |

| | algae | |
|-----------------|--|----------------------------|
| EC50 | > 1 - 10 mg/l (Desmodesmus subspicat (OECD Test Guideline 201)Information obtained from similar substances. | |
| Persistence and | d degradability | |
| Component: | phosphoric acid | CAS-No. 7664-38-2 |
| | Persistence and degradability | |
| | Persistence | |
| Result | : (Related to: Water) Inorganic product w water by biological processes. | hich is not removable from |
| | Biodegradability | |
| Result | : The methods for determining the biolog applicable to inorganic substances. | |
| Component: | formic acid | CAS-No. 64-18-6 |
| | Persistence and degradability | |
| | Persistence | |
| Result | : No data available | |
| | Biodegradability | |
| Result | : 100 % (aerobic; Related to: O2 consum d)(OECD Test Guideline 301C)Readily | biodegradable. |
| Component: | Alcohols, C12-14, ethoxylated | CAS-No. 68439-50-9 |
| | Persistence and degradability | |
| | Persistence | |
| Result | : No data available | |
| | Biodegradability | |
| Result | : > 60 % (OECD Test Guideline 301D) | |
| Component: | Alcohols, C9-11-iso-, C10-rich, ethoxylated (>2.5-5 EO) | CAS-No. 78330-20-8 |
| | Persistence and degradability | |
| | Feisistence and degradability | |

| Result | : | > 70 % (Exposure Time: 28 d)(OECD Test Guideline 301A)Readily biodegradable.Information given is based on data obtained from similar substances. |
|--------|---|--|
| Result | : | > 60 % (Exposure Time: 28 d)(OECD Test Guideline 301B)Readily biodegradable.Information given is based on data obtained from similar substances. |

BRENNTAG

12.3. Bioaccumulative potential

| Component: | phosphoric acid | CAS-No. 7664-38-2 |
|--------------------------|------------------------------------|--------------------|
| | Bioaccumulation | |
| Result | : Not relevant | |
| Component: | formic acid | CAS-No. 64-18-6 |
| | Bioaccumulation | |
| Result | : Bioaccumulation is not expected. | |
| Component: | Alcohols, C12-14, ethoxylated | CAS-No. 68439-50-9 |
| | Bioaccumulation | |
| Result | : No data available | |
| 12.4. Mobility in soil | | |
| | | 040 No 7004 00 0 |
| Component: | phosphoric acid | CAS-No. 7664-38-2 |
| | Mobility | |
| Water | : The product is water soluble. | |
| Air | : Low volatile liquid | |
| Component: | formic acid | CAS-No. 64-18-6 |
| | Mobility | |
| Water | : The product is water soluble. | |
| Component: | Alcohols, C12-14, ethoxylated | CAS-No. 68439-50-9 |
| | Mobility | |
| II | : No data available | |
| 12.5. Results of PBT and | l vPvB assessment | |
| Data for the produc | ct | |
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| | Results of PBT and vPvB assessment | |
|---|---|--|
| | | |
| Result Result | This substance/mixture contains no comeither persistent, bioaccumulative and to persistent and very bioaccumulative (vPrhigher. This substance/mixture contains no comeither persistent, bioaccumulative and to persistent and very bioaccumulative (vPrhigher. | oxic (PBT), or very vB) at levels of 0.1% or ponents considered to be oxic (PBT), or very |
| Component: | phosphoric acid | CAS-No. 7664-38-2 |
| | Results of PBT and vPvB assessment | |
| Result | : The PBT or vPvB criteria of Annex XIII to does not apply to inorganic substances. | o the REACH Regulation |
| Component: | formic acid | CAS-No. 64-18-6 |
| | Results of PBT and vPvB assessment | |
| Result | : No data available | |
| Component | | CAS-No. 68439-50-9 |
| Component: | Alcohols, C12-14, ethoxylated | CAS-NO. 00+33-30-3 |
| Component: | Results of PBT and vPvB assessment | CA3-No. 00453-50-5 |
| Result Endocrine disrupting | Results of PBT and vPvB assessment This substance is not considered to be p nor toxic (PBT)., This substance is not consistent and very bioaccumulating (vP | persistent, bioaccumulating onsidered to be very |
| Result . Endocrine disrupting | Results of PBT and vPvB assessment This substance is not considered to be p nor toxic (PBT)., This substance is not consistent and very bioaccumulating (vP | persistent, bioaccumulating onsidered to be very |
| Result | Results of PBT and vPvB assessment This substance is not considered to be p nor toxic (PBT)., This substance is not consistent and very bioaccumulating (vP | persistent, bioaccumulating onsidered to be very vB). |
| Result Endocrine disrupting Data for the product Endocrine disrupting | Results of PBT and vPvB assessment : This substance is not considered to be p nor toxic (PBT)., This substance is not corpersistent and very bioaccumulating (vP properties : The substance/mixture does not contain have endocrine disrupting properties acc 57(f) or Commission Delegated regulation | bersistent, bioaccumulating onsidered to be very byB). |
| Result Endocrine disrupting Data for the product Endocrine disrupting potential Endocrine disrupting | Results of PBT and vPvB assessment : This substance is not considered to be p nor toxic (PBT)., This substance is not copersistent and very bioaccumulating (vP properties : The substance/mixture does not contain have endocrine disrupting properties acc 57(f) or Commission Delegated regulation (EU) 2018/605 at the substance/mixture does not contain have endocrine disrupting properties acc 57(f) or Commission Delegated regulation (EU) 2018/605 at the substance/mixture does not contain have endocrine disrupting properties acc 57(f) or Commission Delegated regulation (EU) 2018/605 at the substance/mixture does not contain have endocrine disrupting properties acc 57(f) or Commission Delegated regulation | bersistent, bioaccumulating onsidered to be very byB). |
| Result Endocrine disrupting Data for the product Endocrine disrupting potential Endocrine disrupting potential | Results of PBT and vPvB assessment : This substance is not considered to be p nor toxic (PBT)., This substance is not corpersistent and very bioaccumulating (vP properties : The substance/mixture does not contain have endocrine disrupting properties acc 57(f) or Commission Delegated regulation (EU) 2018/605 at the substance/mixture does not contain have endocrine disrupting properties acc 57(f) or Commission Delegated regulation (EU) 2018/605 at the substance/mixture does not contain have endocrine disrupting properties acc 57(f) or Commission Delegated regulation (EU) 2018/605 at the substance/mixture does not contain have endocrine disrupting properties acc 57(f) or Commission Delegated regulation (EU) 2018/605 at the substance/mixture does not contain have endocrine disrupting properties acc 57(f) or Commission Delegated regulation (EU) 2018/605 at the substance/mixture does not contain have endocrine disrupting properties acc 57(f) or Commission Delegated regulation (EU) 2018/605 at the substance/mixture does not contain have endocrine disrupting properties acc 57(f) or Commission Delegated regulation (EU) 2018/605 at the substance/mixture does not contain have endocrine disrupting properties acc 57(f) or Commission Delegated regulation (EU) 2018/605 at the substance/mixture does not contain have endocrine disrupting properties acc 57(f) or Commission Delegated regulation (EU) 2018/605 at the substance/mixture does not contain have endocrine disrupting properties acc 57(f) or Commission Delegated regulation (EU) 2018/605 at the substance/mixture does not contain have endocrine disrupting properties acc 57(f) or Commission Regulation (EU) 2018/605 at the substance/mixture does not contain have endocrine disrupting properties acc 57(f) or Commission Regulation (EU) 2018/605 at the substance/mixture does not contain have endocrine disrupting properties acc 57(f) or Commission Regulation (EU) 2018/605 at the subst | bersistent, bioaccumulating onsidered to be very vB). |
| Result Endocrine disrupting Data for the product Endocrine disrupting potential Endocrine disrupting potential Component: Endocrine disrupting | Results of PBT and vPvB assessment : This substance is not considered to be p nor toxic (PBT)., This substance is not corpersistent and very bioaccumulating (vP properties : The substance/mixture does not contain have endocrine disrupting properties acc 57(f) or Commission Delegated regulation (EU) 2018/605 acc 57(f) or Commission Delegated regulation have endocrine disrupting properties acc 57(f) or Commission Delegated regulation (EU) 2018/605 acc 57(f) or Commission Delegated regulation Commission Regulation (EU) 2018/605 acc 57(f) or Commission Delegated regulation (EU) 2018/605 acc 57(f) or Commission Delegated regulation (EU) 2018/605 acc 57(f) or Commission | bersistent, bioaccumulating onsidered to be very vB). |
| Result Result Data for the product Endocrine disrupting potential Endocrine disrupting potential Component: Endocrine disrupting potential | Results of PBT and vPvB assessment : This substance is not considered to be p nor toxic (PBT)., This substance is not copersistent and very bioaccumulating (vP properties : The substance/mixture does not contain have endocrine disrupting properties acc 57(f) or Commission Delegated regulation Commission Regulation (EU) 2018/605 at the substance/mixture does not contain have endocrine disrupting properties acc 57(f) or Commission Delegated regulation (EU) 2018/605 at the substance/mixture does not contain have endocrine disrupting properties acc 57(f) or Commission Delegated regulation (EU) 2018/605 at the substance/mixture does not contain have endocrine disrupting properties acc 57(f) or Commission Delegated regulation (EU) 2018/605 at the substance/mixture does not contain have endocrine disrupting properties acc 57(f) or Commission Delegated regulation (EU) 2018/605 at the substance/mixture does not contain have endocrine disrupting properties acc 57(f) or Commission Delegated regulation (EU) 2018/605 at the substance/mixture does not contain have endocrine disrupting properties acc 57(f) or Commission Delegated regulation (EU) 2018/605 at the substance/mixture does not contain have endocrine disrupting properties acc 57(f) or Commission Regulation (EU) 2018/605 at the substance/mixture does not contain have endocrine disrupting properties acc 57(f) or Commission Regulation (EU) 2018/605 at the substance/mixture does not contain have endocrine disrupting properties acc 57(f) or Commission Regulation (EU) 2018/605 at the substance/mixture does not contain have endocrine disrupting properties acc 57(f) or Commission Regulation (EU) 2018/605 at the substance/mixture does not contain have endocrine disrupting properties acc 57(f) or Commission Regulation (EU) 2018/605 at the substance/mixture does not contain have endocrine disrupting properties acc 57(f) or Commission Regulation (EU) 2018/605 at the su | bersistent, bioaccumulating onsidered to be very vB). components considered to cording to REACH Article on (EU) 2017/2100 or at levels of 0.1% or higher. components considered to cording to REACH Article on (EU) 2017/2100 or at levels of 0.1% or higher. CAS-No. 7664-38-2 e disruption properties for CAS-No. 64-18-6 |

| potential | environment. | |
|---|--|--|
| Component: | Alcohols, C12-14, ethoxylated | CAS-No. 68439-50-9 |
| Endocrine disrupting potential | : The substance/mixture does not cor have endocrine disrupting properties 57(f) or Commission Delegated regu Commission Regulation (EU) 2018/6 | s according to REACH Article Ilation (EU) 2017/2100 or |
| 7. Other adverse effects Data for the product | 3 | |
| | Additional ecological information | 1 |
| Result | : Do not flush into surface water or sa Avoid subsoil penetration. Harmful effects to aquatic organisms | |
| Result | phosphoric acid | CAS-No. 7664-38-2 |
| Component: | | |
| | Additional ecological information | |
| Result | : Harmful effects to aquatic organisms Solutions with low pH-value must be | e neutralized before discharge. |
| Component: | formic acid | CAS-No. 64-18-6 |
| | Additional ecological information | 1 |
| Result | : Do not flush into surface water or sa Avoid subsoil penetration. | initary sewer system. |
| Component: | Alcohols, C12-14, ethoxylated | CAS-No. 68439-50-9 |
| | Additional ecological information | 1 |
| Result | : Do not flush into surface water or sa Avoid subsoil penetration. Harmful to aquatic life with long lasti | |
| | | |
| CTION 13: Disposal co | onsiderations | |
| 1. Waste treatment met | hods | |
| Product | : Disposal together with normal v disposal required according to l product enter drains. Contact w product shall be disposed of or Directive 2008/98/EC on waste | local regulations. Do not let vaste disposal services. This recovered in compliance with |
| Contaminated packa | ging : Empty contaminated packaging recycled after thorough and pro practicable, dispose of in comp | pper cleaning. If recycling is not |
| | | |



| | Catalogue Number | No waste code according to the European Waste Catalogue can be assigned for this product, as the intended use dictates the assignment. The waste code is established in consultation with the regional waste disposer. |
|--------------|--|---|
| SECTIC | N 14: Transport information | on |
| 14.1. UN | N number or ID number | |
| 3 | 264 | |
| 14.2. l | JN proper shipping name | |
|]] / | | QUID, ACIDIC, INORGANIC, N.O.S. |
| l II F | (Phosphoric acid, RID : CORROSIVE LIC | , Formic acid) QUID, ACIDIC, INORGANIC, N.O.S. |
| - II- | MDG (Phosphoric acid, CORROSIVE LIC (Phosphoric acid, | QUID, ACIDIĆ, INORGANIC, N.O.S. |
| 14.3. Tr | ansport hazard class(es) | |
| (| ADR-Class Labels; Classification Code; Ha dentification Number; Tunnel re code) | : 8 azard estriction 8; C1; 80; (E) |
| (| RID-Class Labels; Classification Code; Ha dentification Number) | : 8 azard |
| | | 8; C1; 80 |
| | MDG-Class Labels; EmS) | : 8 |
| Ì | | 8; F-A, S-B |
| 14.4. Pa | ckaging group | |
| A F II | ADR : III RID : III MDG : III | |
| 14.5. Er | vironmental hazards | |
| E E N | Environmentally hazardous acc Environmentally hazardous acc Marine Pollutant according to IN | cording to ADR : no cording to RID : no MDG-Code : no |
| 14.6. Sp | pecial precautions for user | |
| ٢ | lot applicable. | |
| 250070 | Version 4.0 | 25/30 E |



14.7 Maritime transport in bulk according to IMO instruments

Not applicable for product as supplied.

SECTION 15: Regulatory information

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

| Component: | phosphoric acid | CAS-No. 7664-38-2 |
|---|------------------------------|---------------------------------------|
| EU. Chemicals Subject to PIC Procedure: Regulation 649/2012/EU on export and import of dangerous chemicals, as amended | : ; The substance/mixture d | loes not fall under this legislation. |
| EU. REACH, Annex XVII, Marketing and Use Restrictions (Regulation 1907/2006/EC) | : Point Nos.: , 3; Listed | |
| | Point Nos.: , 75; Listed | |
| EU. Regulation No 1451/2007 [Biocides], Annex I, OJ (L 325) | : EC Number: , 231-633-2; | Listed |
| EU. Directive 2012/18/EU (SEVESO III) on major accident hazards involving dangerous substances, Annex I | : ; The substance/mixture of | does not fall under this legislation. |
| Germany. Ordinance on Facilities Handling Substances that are Hazardous to Water, ((AwSV of 21 April 2017), UBA, BAnz AT), as amended | : WGK 1: slightly hazardous | s to water: 392 |
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| Component: | formic acid | CAS-No. 64-18-6 |
|---|--|----------------------------------|
| EU. Regulation No 1451/2007 [Biocides], Annex I, OJ (L 325) | : EC Number: , 200-579-1; Listed | |
| EU. Regulation No. 1223/2009 on cosmetic products, Annex V: List of Preservatives Allowed in Cosmetic Products | : Maximum concentration in ready for acid 14; All cosmetic products; See applicable exceptions or provisions | e the text of the regulation for |
| EU. Directive 2012/18/EU (SEVESO III) on major accident hazards involving dangerous substances, Annex I | : ; The substance/mixture does not | fall under this legislation. |
| Germany. Ordinance on Facilities Handling Substances that are Hazardous to Water, ((AwSV of 21 April 2017), UBA, BAnz AT), as amended | : WGK 1: slightly hazardous to water | r: 210 |
| | | |
| Component: Alc | cohols, C12-14, ethoxylated | CAS-No. 68439-50-9 |
| Component:AlcEU. Regulation EC No.689/2008 | cohols, C12-14, ethoxylated : ; The substance/mixture does not f | |
| EU. Regulation EC No. | : ; The substance/mixture does not f | |
| EU. Regulation EC No. 689/2008 | : ; The substance/mixture does not f | all under this legislation. |



Π

Germany. Ordinance on : WGK 2: obviously hazardous to water: 670 Facilities Handling Substances that are Hazardous to Water, ((AwSV of 21 April 2017), UBA, BAnz AT), as amended

| Component: | Alcohols, | | o-, C10-rich, ethoxylated 2.5-5 EO) | CAS-No. 78330-20-8 |
|--|-----------|--------|--|---------------------------------|
| EU. Directive 2012/18/EU (S III) on major ac hazards involvi dangerous sub | ing | : ; Th | e substance/mixture does n | ot fall under this legislation. |

15.2. Chemical safety assessment

No data available

Annex I

SECTION 16: Other information

П

Full text of H-Statements referred to under sections 2 and 3.

| H290 | May be corrosive to metals. |
|------|--|
| H302 | Harmful if swallowed. |
| H314 | Causes severe skin burns and eye damage. |
| H318 | Causes serious eye damage. |
| H412 | Harmful to aquatic life with long lasting effects. |

Full text of the Notes referred to under section 3.

Note B Some substances (acids, bases, etc.) are placed on the market in aqueous solutions at various concentrations and, therefore, these solutions require different classification and labelling since the hazards vary at different concentrations. In Part 3 entries with Note B have a general designation of the following type: "nitric acid ...%". In this case the supplier must state the percentage concentration of the solution on the label. Unless otherwise stated, it is assumed that the percentage concentration is calculated on a weight/weight basis.

Abbreviations and Acronyms

| AU AIICL | Australia. Industrial Chemicals Act (AIIC) List | |
|----------------------|---|----|
| BCF | bioconcentration factor | |
| BOD | biochemical oxygen demand | |
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| CLP CMR COD DNEL DSL EINECS ELINCS ENCS (JP) GHS IECSC INSQ ISHL (JP) KECI (KR) LC50 LOAEC | Classification, Labelling and Packaging carcinogenic, mutagenic or toxic to reproduction chemical oxygen demand derived no-effect level Canada. Environmental Protection Act, Domestic Substances European Inventory of Existing Commercial Chemical Substances Japan. Kashin-Hou Law List Globally Harmonized System of Classification and Labelling of Chemicals China. Inventory of Existing Chemical Substances Japan. Inventory of Industrial Safety & Health Korea. Existing Chemicals Inventory median lethal concentration |
|--|---|
| COD DNEL DSL EINECS ELINCS ENCS (JP) GHS IECSC INSQ ISHL (JP) KECI (KR) LC50 | chemical oxygen demand derived no-effect level Canada. Environmental Protection Act, Domestic Substances European Inventory of Existing Commercial Chemical Substances Japan. Kashin-Hou Law List Globally Harmonized System of Classification and Labelling of Chemicals China. Inventory of Existing Chemical Substances Mexico. National Inventory of Chemical Substances Japan. Inventory of Industrial Safety & Health Korea. Existing Chemicals Inventory |
| DNEL DSL EINECS ELINCS ENCS (JP) GHS IECSC INSQ ISHL (JP) KECI (KR) LC50 | derived no-effect level Canada. Environmental Protection Act, Domestic Substances European Inventory of Existing Commercial Chemical Substances Japan. Kashin-Hou Law List Globally Harmonized System of Classification and Labelling of Chemicals China. Inventory of Existing Chemical Substances Mexico. National Inventory of Chemical Substances Japan. Inventory of Industrial Safety & Health Korea. Existing Chemicals Inventory |
| DSL EINECS ELINCS ENCS (JP) GHS IECSC INSQ ISHL (JP) KECI (KR) LC50 | Canada. Environmental Protection Act, Domestic Substances European Inventory of Existing Commercial Chemical Substances European List of Notified Chemical Substances Japan. Kashin-Hou Law List Globally Harmonized System of Classification and Labelling of Chemicals China. Inventory of Existing Chemical Substances Mexico. National Inventory of Chemical Substances Japan. Inventory of Industrial Safety & Health Korea. Existing Chemicals Inventory |
| EINECS ELINCS ENCS (JP) GHS IECSC INSQ ISHL (JP) KECI (KR) LC50 | European Inventory of Existing Commercial Chemical Substances European List of Notified Chemical Substances Japan. Kashin-Hou Law List Globally Harmonized System of Classification and Labelling of Chemicals China. Inventory of Existing Chemical Substances Mexico. National Inventory of Chemical Substances Japan. Inventory of Industrial Safety & Health Korea. Existing Chemicals Inventory |
| ELINCS ENCS (JP) GHS IECSC INSQ ISHL (JP) KECI (KR) LC50 | European List of Notified Chemical Substances Japan. Kashin-Hou Law List Globally Harmonized System of Classification and Labelling of Chemicals China. Inventory of Existing Chemical Substances Mexico. National Inventory of Chemical Substances Japan. Inventory of Industrial Safety & Health Korea. Existing Chemicals Inventory |
| ENCS (JP) GHS IECSC INSQ ISHL (JP) KECI (KR) LC50 | Japan. Kashin-Hou Law List Globally Harmonized System of Classification and Labelling of Chemicals China. Inventory of Existing Chemical Substances Mexico. National Inventory of Chemical Substances Japan. Inventory of Industrial Safety & Health Korea. Existing Chemicals Inventory |
| GHS IECSC INSQ ISHL (JP) KECI (KR) LC50 | Globally Harmonized System of Classification and Labelling of Chemicals China. Inventory of Existing Chemical Substances Mexico. National Inventory of Chemical Substances Japan. Inventory of Industrial Safety & Health Korea. Existing Chemicals Inventory |
| IECSC INSQ ISHL (JP) KECI (KR) LC50 | Chemicals China. Inventory of Existing Chemical Substances Mexico. National Inventory of Chemical Substances Japan. Inventory of Industrial Safety & Health Korea. Existing Chemicals Inventory |
| INSQ ISHL (JP) KECI (KR) LC50 | Mexico. National Inventory of Chemical Substances Japan. Inventory of Industrial Safety & Health Korea. Existing Chemicals Inventory |
| ISHL (JP) KECI (KR) LC50 | Japan. Inventory of Industrial Safety & Health Korea. Existing Chemicals Inventory |
| KECI (KR) LC50 | Korea. Existing Chemicals Inventory |
| LC50 | |
| | median lethal concentration |
| LOAEC | |
| | lowest observed adverse effect concentration |
| LOAEL | lowest observed adverse effect level |
| LOEL | lowest observed effect level |
| NDSL | Canada. Environmental Protection Act. Non-Domestic Substa List |
| NLP | no-longer polymer |
| NOAEC | no observed adverse effect concentration |
| NOAEL | no observed adverse effect level |
| NOEC | no observed effect concentration |
| NOEL | no observed effect level |
| NZIOC | New Zealand. Inventory of Chemicals |
| OECD | Organisation for Economic Cooperation and Development |
| OEL | occupational exposure limit |
| ONT INV | Canada. Ontario Inventory List |
| PBT | persistent, bioaccumulative and toxic |
| PHARM (JP) | Japan. Pharmacopoeia Listing |
| PICCS (PH) | Philippines. Inventory of Chemicals and Chemical Substances |
| PNEC | predicted no-effect concentration |
| REACH Auth. No.: | REACH Authorisation Number |
| REACH AuthAppC. No. | REACH Authorisation Application Consultation Number |
| STOT | specific target organ toxicity |
| SVHC | substance of very high concern |
| TCSI | Taiwan. Existing Chemicals Inventory |
| THINV | Thailand. Existing Chemicals Inventory from FDA |
| TSCA | US. Toxic Substances Control Act |



| | UVCB | | substance of unknown or variable composition, complex reaction products or biological materials |
|---------------------|--|---|---|
| | VN INVL | | Vietnam. National Chemical Inventory |
| | vPvB | | very persistent and very bioaccumulative |
| Further information | | | |
| | Key literature references and sources for data | : | Supplier information and data from the "Database of registered substances" of the European Chemicals Agency (ECHA) were used to create this safety data sheet. |
| | Methods used for product classification | : | The classification for human health, physical and chemical hazards and environmental hazards were derived from a combination of calculation methods and if available test data. |
| | Hints for trainings | : | The workers have to be trained regularly on the safe handling of the products based on the information provided in the Safety Data Sheet and the local conditions of the workplace. National regulations for the training of workers in the handling of hazardous materials must be adhered to. |
| | Other information | : | The information provided in this Safety Data Sheet is correct to our knowledge at the date of its revision. The information given only describes the products with regard to safety arrangements and is not to be considered as a warranty or quality specification and does not constitute a legal relationship. The information contained in this Safety Data Sheet |
| | | | relates only to the specific material designated and may not be valid for such material used in combination with any other material or in any process, unless specified in the text. |

|| Indicates updated section.