

SAFETY DATA SHEET of: SPA CARTRIDGE CLEAN

Revision date: Monday, January 18, 2016

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

1.1 Product identifier:

SPA CARTRIDGE CLEAN

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

/

Concentration in use: /

1.3 Details of the supplier of the safety data sheet:

MEGA GROUP

Doornhoek 4205

5465 TG VEGHEL

Phone: 031413747300 — Fax:

E-mail: aheij@megagrouptrade.com — Website: <http://www.megagrouptrade.com/>

1.4 Emergency telephone number:

+32 70 245 245

2 SECTION 2: Hazards identification:

2.1 Classification of the substance or mixture:

Classification of the substance or mixture in accordance with regulation (EU) 1272/2008:

H290 Met. Corr. 1 H314 Skin Corr. 1A

2.2 Label elements:

Pictograms:



Signal word:

Danger

Hazard statements:

| | |
|----------------------------|------------------------------------------|
| H290 Met. Corr. 1: | May be corrosive to metals. |
| H314 Skin Corr. 1A: | Causes severe skin burns and eye damage. |

Precautionary statements:

| | |
|------------------------|----------------------------------------------------------------------------------------------------------------------------------|
| P234: | Keep only in original container. |
| P280: | Wear protective gloves, protective clothing, eye protection, face protection. |
| P301+P330+P331: | IF SWALLOWED: rinse mouth. Do NOT induce vomiting. |
| P303+P361+P353: | IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water/shower. |
| P304+P340: | IF INHALED: Remove person to fresh air and keep comfortable for breathing. |
| P305+P351+P338: | IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. |

Contains:

none

2.3 Other hazards:

none

3 SECTION 3: Composition/information on ingredients:

| | | |
|-------------------------------------|-------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Hydroxyethylidene diphosphonic acid | > 30% | CAS number: 2809-21-4 EINECS: 220-552-8 REACH Registration number: 01-2119510391-53 CLP Classification: H290 Met. Corr. 1 H302 Acute tox. 4 H318 Eye Dam. 1 |
|-------------------------------------|-------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|

For the full text of the H & R phrases mentioned in this section, see section 16.

4 SECTION 4: First aid measures:

4.1 Description of first aid measures:

Always ask medical advice as soon as possible should serious or continuous disturbances occur.

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|----------------------|------------------------------------------------------------------------------------------------------------------|
| Skin contact: | remove contaminated clothing, rinse skin with plenty of water and immediately transport to hospital. |
| Eye contact: | first prolonged rinsing with water (contact lenses to be removed if this is easily done) then take to physician. |
| Ingestion: | rinse mouth, do not induce vomiting, take to hospital immediately. |
| Inhalation: | let sit upright, fresh air, rest and take to hospital. |

4.2 Most important symptoms and effects, both acute and delayed:

| | |
|----------------------|----------------------------------------------------------------------------------------------------------------------|
| Skin contact: | caustic, redness, pain, serious burns |
| Eye contact: | caustic, redness, bad looking, pain |
| Ingestion: | caustic, lack of breath, vomiting, blisters on lips and tongue, burning pain in mouth and throat, gullet and stomach |
| Inhalation: | headache, dizziness, nausea, drowsiness, unconsciousness |

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

none

5 SECTION 5: Fire-fighting measures:

5.1 Extinguishing media:

CO2, foam, powder, sprayed water

5.2 Special hazards arising from the substance or mixture:

none

5.3 Advice for fire-fighters:

Extinguishing agents to be avoided: none

6 SECTION 6: Accidental release measures:

6.1 Personal precautions, protective equipment and emergency procedures:

Do not walk into or touch spilled substances and avoid inhalation of fumes, smoke, dusts and vapours by staying up wind. Remove any contaminated clothing and used contaminated protective equipment and dispose of it safely.

6.2 Environmental precautions:

do not allow to flow into sewers or open water.

6.3 Methods and material for containment and cleaning up:

remove by using absorbent material.

6.4 Reference to other sections:

for further information check sections 8 & 13.

7 SECTION 7: Handling and storage:

7.1 Precautions for safe handling:

handle with care to avoid spillage.

7.2 Conditions for safe storage, including any incompatibilities:

keep in a sealed container in a closed, frost-free, ventilated room.

7.3 Specific end use(s):

/





8 SECTION 8: Exposure controls/personal protection:

8.1 Control parameters:

Listing of the hazardous ingredients in section 3, of which the TLV value is known

/

8.2 Exposure controls:

| | | |
|-------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| Inhalation protection: | use with sufficient exhaust ventilation. If necessary, use an air-purifying face mask in case of respiratory hazards. Use the ABEK type as protection against these troublesome levels. |  |
| Skin protection: | handling with Viton-gloves (EN 374). Breakthrough time: >480'. Material thickness: 0,7 mm. Thoroughly check gloves before use. Take off the gloves properly without touching the outside with your bare hands. The manufacturer of the protective gloves has to be consulted about the suitability for a specific work station. Wash and dry your hands. |  |
| Eye protection: | keep an eye-rinse bottle within reach. Tight-fitting safety goggles. Wear a face shield and protective suit in case of exceptional processing problems. |  |
| Other protection: | impermeable clothing. The type of protective equipment depends on the concentration and amount of hazardous substances at the work station in question. |  |

9 SECTION 9: Physical and chemical properties:

9.1 Information on basic physical and chemical properties:

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|--------------------------------------------------------|--------------------|
| Melting point/melting range: | 0 °C |
| Boiling point/Boiling range: | 100 °C |
| pH: | 0.5 |
| pH 1% diluted in water: | / |
| Vapour pressure/20°C,: | 2 332 Pa |
| Vapour density: | not applicable |
| Relative density, 20°C: | 1.200 kg/l |
| Appearance/20°C: | liquid |
| Flash point: | / |
| Flammability (solid, gas): | not applicable |
| Auto-ignition temperature: | / |
| Upper flammability or explosive limit, (Vol %): | / |
| Lower flammability or explosive limit, (Vol %): | / |
| Explosive properties: | not applicable |
| Oxidising properties: | not applicable |
| Decomposition temperature: | / |
| Solubility in water: | completely soluble |
| Partition coefficient: n-octanol/water: | not applicable |
| Odour: | characteristic |
| Odour threshold: | not applicable |
| Dynamic viscosity, 20°C: | 1 mPa.s |
| Kinematic viscosity, 20°C: | 1 mm²/s |
| Evaporation rate (n-BuAc = 1): | 0.300 |

9.2 Other information:

Volatile organic component (VOC): /
Volatile organic component (VOC): 0.000 g/l

10 SECTION 10: Stability and reactivity:

10.1 Reactivity:

stable under normal conditions.

10.2 Chemical stability:

extremely high or low temperatures.

10.3 Possibility of hazardous reactions:

none

10.4 Conditions to avoid:

protect from sunlight and do not expose to temperatures exceeding + 50°C.

10.5 Incompatible materials:

none

10.6 Hazardous decomposition products:

doesn't decompose with normal use

11 SECTION 11: Toxicological information:

11.1 Information on toxicological effects:

H314 Skin Corr. 1A: Causes severe skin burns and eye damage.

Calculated acute toxicity, ATE oral: /

Calculated acute toxicity, ATE dermal: /

| | | |
|-------------------------------------|----------------------------|---------------|
| Hydroxyethylidene diphosphonic acid | LD50 oral, rat: | 1,878 mg/kg |
| | LD50 dermal, rabbit: | ≥ 5,000 mg/kg |
| | LC50, Inhalation, rat, 4h: | ≥ 50 mg/l |

12 SECTION 12: Ecological information:

12.1 Toxicity:

No additional data available

12.2 Persistence and degradability:

No additional data available

12.3 Bioaccumulative potential:

No additional data available

12.4 Mobility in soil:

Water hazard class, WGK: 2
Solubility in water: completely soluble

12.5 Results of PBT and vPvB assessment:

No additional data available

12.6 Other adverse effects:

No additional data available

13 SECTION 13: Disposal considerations:

13.1 Waste treatment methods:

The product may be discharged in the indicated percentages of utilization, provided it is neutralised to pH 7. Possible restrictive regulations by local authority should always be adhered to.

14 SECTION 14: Transport information:

14.1 UN number:

3264

14.2 UN proper shipping name:

UN 3264 Corrosive liquid, acidic, inorganic, n.o.s. (mixture with Hydroxyethylidene diphosphonic acid) , 8, II, (E)

14.3 Transport hazard class(es):

Class(es): 8
Identification number of the hazard: 80

14.4 Packing group:

II

14.5 Environmental hazards:

not dangerous to the environment

14.6 Special precautions for user:

Hazard characteristics: Risk of burns. Risk to the aquatic environment and the sewerage system.
Additional guidance:



15 SECTION 15: Regulatory information:

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

| | |
|-------------------------------------------------|--------------------|
| Water hazard class, WGK: | 2 |
| Volatile organic component (VOC): | / |
| Volatile organic component (VOC): | 0.000 g/l |
| Composition by regulation (EC) 648/2004: | Phosphonates > 30% |

15.2 Chemical Safety Assessment:

No data available

16 SECTION 16: Other information:

Legend to abbreviations used in the safety data sheet:

| | |
|----------------|-------------------------------------------------------------------------------------------|
| ADR: | Accord européen relatif au transport international des marchandises Dangereuses par Route |
| BCF: | Bioconcentration factor |
| CAS: | Chemical Abstracts Service |
| CLP: | Classification, Labelling and Packaging of chemicals |
| EINECS: | European INventory of Existing Commercial chemical Substances |
| Nr.: | number |
| PTB: | persistent, toxic, bioaccumulative |
| TLV: | Threshold Limit Value |
| vPvB: | very persistent and very bioaccumulative substances |
| WGK: | Water hazard class |
| WGK 1: | slightly hazardous for water |
| WGK 2: | hazardous for water |
| WGK 3: | extremely hazardous for water |

Legend to the R & H Phrases used in the safety data sheet:

| | |
|---------------------------------------------------------------------|----------------------------------------------------|
| H290 Met. Corr. 1: May be corrosive to metals. | H302 Acute tox. 4: Harmful if swallowed. |
| H314 Skin Corr. 1A: Causes severe skin burns and eye damage. | H318 Eye Dam. 1: Causes serious eye damage. |

Reason of revision, changes of following items:

none

MSDS reference number:

ECM-4565,10

This safety information sheet has been compiled in accordance with annex II/A of the regulation (EU) No 2015/830. Classification has been calculated in accordance with European regulation 1272/2008 with their respective amendments. It has been compiled with the utmost care. We cannot, however, accept responsibility for damage, of any kind, that may be caused by using these data or the product concerned. To use this preparation for an experiment or a new application, the user must carry out a material suitability and safety study himself.