



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

- **1.1 Product identifier**
- **Trade name:** *BioClean Acidic 466*
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
- **Technical function** *Cleaning agent*
- **Application of the substance / the mixture**
Industrial cleaner
Acidic Cleaning material/ Detergent
- **1.3 Details of the supplier of the safety data sheet**
- **Manufacturer/Supplier:**
Apex Group of Companies
Apex Europe B.V.
Metaalweg 8
5527 AK Hapert Nederland
Tel: + 31 (0) 497 36 11 11
Fax: + 31 (0) 497 36 11 22
E-mail: info@apex-europe.com
Website: www.apex-groupofcompanies.com
- **Further information obtainable from:**
Safety department.
Tel: + 31 (0) 497 36 11 11
Fax: + 31 (0) 497 36 11 22
E-mail: safety@apex-europe.com
- **1.4 Emergency telephone number:**
During office hours we can be contacted for general information at:
Tel: + 31 (0) 497 36 11 11

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**
Met. Corr. 1 H290 May be corrosive to metals.
Acute Tox. 4 H302 Harmful if swallowed.
Skin Corr. 1B H314 Causes severe skin burns and eye damage.
Eye Dam. 1 H318 Causes serious eye damage.
- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008**
The product is classified and labelled according to the CLP regulation.
- **Hazard pictograms**

GHS05 GHS07
- **Signal word** *Danger*
- **Hazard-determining components of labelling:**
Phosphoric acid
2-Butoxyethanol
DECETH-8
- **Hazard statements**
H290 May be corrosive to metals.
H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
- **Precautionary statements**
P234 Keep only in original container.
P260 Do not breathe mist/vapours/spray.

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- P280 Wear protective gloves / eye 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.
- 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 CENTER/doctor.
- P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3 Other hazards

Results of PBT and vPvB assessment

PBT: Not applicable.

vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

3.2 Chemical characterisation: Mixtures

Description: Mixture of substances listed below with nonhazardous additions.

Dangerous components:

| | | |
|--|--|--------|
| CAS: 7664-38-2 EINECS: 231-633-2 Index number: 015-011-00-6 Reg.nr.: 01-2119485924-24 | Phosphoric acid Met. Corr.1, H290; Skin Corr. 1B, H314; Acute Tox. 4, H302 | >25% |
| CAS: 111-76-2 EINECS: 203-905-0 Index number: 603-014-00-0 Reg.nr.: 01-2119475108-36 | 2-Butoxyethanol Acute Tox. 4, H302; Acute Tox. 4, H312; Acute Tox. 4, H332; Skin Irrit. 2, H315; Eye Irrit. 2, H319 | 15-30% |
| CAS: 526-95-4 EINECS: 208-401-4 Reg.nr.: 01-2119454394-36 | D-gluconic acid Eye Irrit. 2, H319 | 1-5% |
| CAS: 26183-52-8 Reg.nr.: 02-2119613039-45 | DECETH-8 Acute Tox. 4, H302; Eye Irrit. 2, H319 | 1-5% |

Additional information:

For the wording of the listed risk phrases refer to section 16. Product compositional ranges are shown for health, safety and environmental use and are not intended to form any part of a specification.

SECTION 4: First aid measures

4.1 Description of first aid measures

After inhalation: Supply fresh air; consult doctor in case of complaints.

After skin contact:

Immediately wash with water and soap and rinse thoroughly.

Immediately rinse with water.

After eye contact: Rinse opened eye for several minutes under running water. Then consult a doctor.

After swallowing:

Do not induce vomiting; call for medical help immediately.

Call for a doctor immediately.

Drink plenty of water and provide fresh air. Call for a doctor immediately.

4.2 Most important symptoms and effects, both acute and delayed No further relevant information available.

4.3 Indication of any immediate medical attention and special treatment needed

No further relevant information available.

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SECTION 5: Firefighting measures

- **5.1 Extinguishing media**
- **Suitable extinguishing agents:** Use fire extinguishing methods suitable to surrounding conditions.
- **5.2 Special hazards arising from the substance or mixture**
During heating or in case of fire poisonous gases are produced.
- **5.3 Advice for firefighters**
- **Protective equipment:** Mouth respiratory protective device.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
Mount respiratory protective device.
Wear protective equipment. Keep unprotected persons away.
- **6.2 Environmental precautions:**
Dilute with plenty of water.
Do not allow to enter sewers/ surface or ground water.
- **6.3 Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).
Use neutralising agent.
Dispose contaminated material as waste according to item 13.
Ensure adequate ventilation.
- **6.4 Reference to other sections**
See Section 7 for information on safe handling.
See Section 8 for information on personal protection equipment.
See Section 13 for disposal information.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**
Ensure good ventilation/exhaustion at the workplace.
When diluting always pour product into water and not vice versa.
Prevent formation of aerosols.
Use only in well ventilated areas.
- **Information about fire - and explosion protection:** Keep respiratory protective device available.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** No special requirements.
- **Information about storage in one common storage facility:**
Do not store together with alkalis (caustic solutions).
- **Further information about storage conditions:**
Protect from frost.
Keep container tightly sealed.
Store in cool, dry conditions in well sealed receptacles.
- **Storage class:** 8 B
- **7.3 Specific end use(s)** No further relevant information available.

SECTION 8: Exposure controls/personal protection

- **Additional information about design of technical facilities:** No further data; see item 7.

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· **8.1 Control parameters**

· **Ingredients with limit values that require monitoring at the workplace:**

7664-38-2 Phosphoric acid

| | |
|-------|---------------------------------------|
| IOELV | Short-term value: 2 mg/m ³ |
| | Long-term value: 1 mg/m ³ |

111-76-2 2-Butoxyethanol

| | |
|-------|--|
| IOELV | Short-term value: 246 mg/m ³ , 50 ppm |
| | Long-term value: 98 mg/m ³ , 20 ppm |
| | Skin |

· **DNELs**

7664-38-2 Phosphoric acid

| | | |
|------------|------------------------------------|-----------------------------------|
| Inhalative | Long-term exposure - local effects | 0.73 mg/m ³ (Consumer) |
| | | 2.92 mg/m ³ (Worker) |

· **Additional information:** The lists valid during the making were used as basis.

· **8.2 Exposure controls**

· **Personal protective equipment:**

· **General protective and hygienic measures:**

Keep away from foodstuffs, beverages and feed.
Immediately remove all soiled and contaminated clothing
Wash hands before breaks and at the end of work.
Do not inhale gases / fumes / aerosols.
Avoid contact with the eyes.
Avoid contact with the eyes and skin.

· **Respiratory protection:**



During operations which cause the formation of vapor / mist / aerosol, use a half face mask according NEN140, or a full face mask according NEN136.

· **Recommended filter device for short term use: ABEK/P2**

· **Protection of hands:**

Preventive skin protection by use of gloves is recommended.
The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation.

· **Material of gloves**



The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application. Suitability (penetration time, material thickness) for a specific workplace should be discussed with the manufacturer of the protective gloves.

· **Penetration time of glove material**

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

· **For the permanent contact gloves made of the following materials are suitable:**

Butyl rubber: Penetration time >480 min - Recommended thickness: 0,4 mm
Nitrile rubber: Penetration time >480 min - Recommended thickness: 0,35 mm
PVC: Penetration time >480 min - Recommended thickness: 0,5 mm

· **For the permanent contact of a maximum of 15 minutes gloves made of the following materials are suitable:**

Nitrile rubber. Penetration time 30 min - Recommended thickness: 0,13 mm

· **As protection from splashes gloves made of the following materials are suitable:**

PVC (EN374)
Nitrile rubber: 0.11 mm (EN374)

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· **Eye protection:**



Tightly sealed goggles

· **Body protection:**



Acid resistant protective clothing

SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

| | |
|-------------------------|-----------------|
| Form: | Liquid |
| Colour: | Brown |
| Odour: | Characteristic |
| Odour threshold: | Not determined. |

· **pH-value at 20 °C:** 1

· **Change in condition**

| | |
|---|---------------|
| Melting point/freezing point: | Undetermined. |
| Initial boiling point and boiling range: | >100 °C |

· **Flash point (CCMP):** Not applicable.

· **Flammability (solid, gas):** Not applicable.

· **Ignition temperature:** 240 °C

· **Decomposition temperature:** Not determined.

· **Auto-ignition temperature:** Product is not selfigniting.

· **Explosive properties:** Product does not present an explosion hazard.

· **Explosion limits:**

| | |
|---------------|------------|
| Lower: | 1.1 Vol % |
| Upper: | 10.6 Vol % |

· **Vapour pressure at 20 °C:** 23 hPa

· **Density at 20 °C:** 1.25 g/cm³

· **Relative density** Not determined.

· **Vapour density** Not determined.

· **Evaporation rate** Not determined.

· **Solubility in / Miscibility with water:** Fully miscible.

· **Partition coefficient: n-octanol/water:** Not determined.

· **Viscosity:**

| | |
|-------------------|-----------------|
| Dynamic: | Not determined. |
| Kinematic: | Not determined. |

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· **9.2 Other information**

Product compositional ranges are shown for health, safety and environmental use and are not intended to form any part of a specification.

SECTION 10: Stability and reactivity

- **10.1 Reactivity** No further relevant information available.
- **10.2 Chemical stability**
- **Thermal decomposition / conditions to be avoided:** No decomposition if used according to specifications.
- **10.3 Possibility of hazardous reactions**
 Reacts with various metals.
 Corrosive action on metals.
 Reacts with strong alkali.
 Reacts with oxidising agents.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:** No dangerous decomposition products known.

SECTION 11: Toxicological information

· **11.1 Information on toxicological effects**

· **Acute toxicity**

Harmful if swallowed.

· **LD/LC50 values relevant for classification:**

7664-38-2 Phosphoric acid

| | | |
|--------|------|----------------------|
| Oral | LD50 | 2,600 mg/kg bw (Rat) |
| Dermal | LD50 | 2,740 mg/kg bw (rab) |

· **Primary irritant effect:**

· **Skin corrosion/irritation**

Causes severe skin burns and eye damage.

· **Serious eye damage/irritation**

Causes serious eye damage.

· **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.

· **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)**

· **Germ cell mutagenicity** Based on available data, the classification criteria are not met.

· **Carcinogenicity** Based on available data, the classification criteria are not met.

· **Reproductive toxicity** Based on available data, the classification criteria are not met.

· **STOT-single exposure** Based on available data, the classification criteria are not met.

· **STOT-repeated exposure** Based on available data, the classification criteria are not met.

· **Aspiration hazard** Based on available data, the classification criteria are not met.

SECTION 12: Ecological information

· **12.1 Toxicity**

· **Aquatic toxicity:**

7664-38-2 Phosphoric acid

| | |
|----------|--|
| NOEC/72h | 100 mg/l (Desmodesmus Subspicatus) (OESO 201) |
| EC50/48h | >100 mg/l (Daphnia Magna) (OESO 202) |
| LC50/96h | 3-3.25 mg/l (Lepomis Macrochirus) |
| EC50/72h | >100 mg/l (Desmodesmus Subspicatus) (OESO 201) |

· **12.2 Persistence and degradability**

The surfactant(s) contained in this preparation complies(comply) with the biodegradability criteria as laid down in Regulation (EC) No.648/2004 on detergents. Data to support this assertion are held at the disposal

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of the competent authorities of the Member States and will be made available to them, at their direct request or at the request of a detergent manufacturer.

· **12.3 Bioaccumulative potential** No further relevant information available.

· **12.4 Mobility in soil** No further relevant information available.

· **Additional ecological information:**

· **General notes:**

Water hazard class 1 (German Regulation) (Self-assessment): slightly hazardous for water

Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.

Must not reach sewage water or drainage ditch undiluted or unneutralised.

Rinse off of bigger amounts into drains or the aquatic environment may lead to decreased pH-values. A low pH-value harms aquatic organisms. In the dilution of the use-level the pH-value is considerably increased, so that after the use of the product the aqueous waste, emptied into drains, is only low water-dangerous.

· **12.5 Results of PBT and vPvB assessment**

· **PBT:** Not applicable.

· **vPvB:** Not applicable.

· **12.6 Other adverse effects** No further relevant information available.

SECTION 13: Disposal considerations

· **13.1 Waste treatment methods**

· **Recommendation**



Must not be disposed together with household garbage. Do not allow product to reach sewage system.

· **European waste catalogue**

The EC waste catalog number (EAC) can only be determined after the type of use by the end-user is known for this product.

· **Uncleaned packaging:**

· **Recommendation:** Disposal must be made according to official regulations.

· **Recommended cleansing agents:** Water, if necessary together with cleansing agents.

SECTION 14: Transport information

· **14.1 UN-Number**

· **ADR/RID/ADN, IMDG, IATA**

UN3264

· **14.2 UN proper shipping name**

· **ADR/RID/ADN**

3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (PHOSPHORIC ACID, SOLUTION)

· **IMDG, IATA**

CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (PHOSPHORIC ACID, SOLUTION)

· **14.3 Transport hazard class(es)**

· **ADR/RID/ADN, IMDG, IATA**



· **Class**

8 Corrosive substances.

· **Label**

8

· **ADN/R Class:**

8 Corrosive substances.

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| | |
|--|--|
| · 14.4 Packing group | |
| · ADR/RID/ADN, IMDG, IATA | III |
| · 14.5 Environmental hazards: | |
| · Marine pollutant: | No |
| · 14.6 Special precautions for user | Warning: Corrosive substances. |
| · Danger code (Kemler): | 80 |
| · EMS Number: | F-A,S-B |
| · Segregation groups | Acids |
| · Stowage Category | A |
| · Stowage Code | SW2 Clear of living quarters. |
| · 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code | Not applicable. |
| · Transport/Additional information: | |
| · ADR/RID/ADN | |
| · Limited quantities (LQ) | 5L |
| · Excepted quantities (EQ) | Code: E1 |
| | Maximum net quantity per inner packaging: 30 ml |
| | Maximum net quantity per outer packaging: 1000 ml |
| · Transport category | 3 |
| · Tunnel restriction code | E |
| · IMDG | |
| · Limited quantities (LQ) | 5L |
| · Excepted quantities (EQ) | Code: E1 |
| | Maximum net quantity per inner packaging: 30 ml |
| | Maximum net quantity per outer packaging: 1000 ml |
| · UN "Model Regulation": | UN 3264 CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (PHOSPHORIC ACID, SOLUTION), 8, III |

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SECTION 15: Regulatory information

- **15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture**
- **Directive 2012/18/EU**
- **Named dangerous substances - ANNEX I** None of the ingredients is listed.
- **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3

· **Regulation (EC) No 648/2004 on detergents / Labelling for contents**

| | |
|-----------------------|---------------|
| phosphates | ≥30% |
| non-ionic surfactants | <5% |

- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

This Safety Data Sheet is exclusively meant for industrial/professional use.

- **Relevant phrases**
- H290 May be corrosive to metals.
- H302 Harmful if swallowed.
- H312 Harmful in contact with skin.
- H314 Causes severe skin burns and eye damage.

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H315 Causes skin irritation.

H319 Causes serious eye irritation.

H332 Harmful if inhaled.

· **Department issuing SDS:** Product safety department.

· **Contact:** J. Graat

· **Abbreviations and acronyms:**

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organisation

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

DNEL: Derived No-Effect Level (REACH)

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

Met. Corr. 1: Corrosive to metals – Category 1

Acute Tox. 4: Acute toxicity – Category 4

Skin Corr. 1B: Skin corrosion/irritation – Category 1B

Skin Irrit. 2: Skin corrosion/irritation – Category 2

Eye Dam. 1: Serious eye damage/eye irritation – Category 1

Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

· **Sources**

This information is based on the currently available resources. (Producers of raw materials, Chemical cards, EC directives, ADR / RID, ECHA)

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· *** Data compared to the previous version altered.**