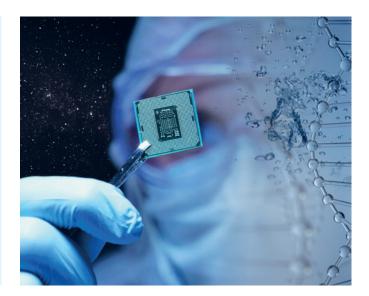
deconex[®] HPC 1202

Highly acidic special cleaner with broad material compatibility for applications in the vacuum industry



deconex® HPC products for the highest demands

deconex[®] HPC products have been developed especially for validatable cleaning processes involving components in the vacuum industry, semiconductor production and aerospace technology.

Our services and products allow the creation of a customised, perfectly coordinated and effective cleaning process.

Used for the pre-cleaning and final cleaning stages, as well as for neutralisation after cleaning.

Precision cleaning chemicals for residue-free and corrosion-free cleaning.

Application

deconex[®] HPC 1202 is a highly acidic cleaning concentrate for cleaning various materials. As a result of its properties, deconex[®] HPC 1202 can be used for both pre-cleaning, final cleaning and for neutralisation after cleaning.

deconex[®] HPC 1202 is suitable for residue-free and reproducible cleaning in production in the vacuum industry, semiconductor manufacturing and aerospace technology.

The use of deconex[®] 1202 has been developed for all industries with the highest cleanliness requirements.

We especially recommend deconex[®] HCP 1202 in situations where high material compatibility is required. Information regarding the variety of compatible materials can be found in the section on material compatibility.

The product can also be used after the actual cleaning stage as a neutraliser or for improved rinsing properties. As a result, the formation of stains on the cleaning material is prevented. deconex[®] HPC 1202 is a special cleaner for fully automatic, semi-automatic or manual cleaning, allowing it to be used in the following production systems:

- Vacuum processes
- Spray processes
- Immersion/flooding processes with/without ultrasonic
- Closed and open systems
- Manual cleaning of small and large parts"

Properties

Thanks to its specific composition, deconex[®] HPC 1202 supports a broad range of applications and broad material compatibility.

deconex[®] HPC 1202 reliably removes residues of oils and oil emulsions, lightly adhering residue such as dust and fingerprints, and alkaline residue and acid-soluble deposits.

deconex $^{\scriptscriptstyle \otimes}$ HPC 1202 has the following particular characteristics:

- free from silicates
- free from surfactants
- free from chlorine
- free from phosphate
- liquid phase
- no colouring agents (cleaner is clear / colourless)
- rinses residue-free
- improves rinsing properties
- can be used without a neutralisation step
- effectively neutralises following alkaline cleaning
- can be used manually and with machinery
- non-foaming in spray cleaning processes
- biologically easily degradable

deconex[®] HPC 1202 has properties that can be utilised for the maintenance and cleaning of existing cleaning systems as well as for the commissioning of new ones.

deconex[®] HPC 1202 is non-foaming and can also be used at high spray pressures.



deconex[®] HPC 1202

Ingredients

Organic acids

Dosage

The optimum dosage depends mainly on the type and degree of contamination, the cleaning equipment used and the cleaning process. The use of deionised water improves the cleaning properties and reduces the required amount of cleaner.

deconex[®] HPC 1202 is most frequently used in the following concentration in the cleaning stage / application in question:

| Cleaning | Dosage | Temperature |
|---|---------------|-------------|
| Pre-cleaning | 1.5% to 3.0% | 30°C - 65°C |
| Final cleaning | 0.5% to 1.5% | 30°C - 65°C |
| Neutralisation | 0.1% to 0.5% | 30°C - 65°C |
| Maintenance and cleaning of existing cleaning systems | 3.0% to 5.0% | 30°C - 65°C |
| Cleaning of new cleaning systems | 5.0% to 10.0% | 30°C - 65°C |

The concentration can vary depending on the soiling and the system technology. The process parameters (time and temperature) must be adjusted to the parts/materials to be cleaned.

Process monitoring

During process monitoring, the following options are available for determining the concentration:

- conductance measurement
- titration measurement (acid/base determination)
- pH value measurement

Borer Chemie AG provides appropriate documentation for determining the concentration of the cleaning bath.

Chemical-physical data

| pH value | 1% in demineralised water | approx. 2.6 |
|------------|---------------------------|----------------------|
| Density | Concentrate | 1.17 g/mL |
| Appearance | Concentrate | Clear, colourless |

Instructions for use

Due to its composition, deconex[®] HPC 1202 ensures optimum cleaning results for sensitive materials. The special formulation prevents corrosive attack on the treated surfaces and thus prolongs the lifetime of the cleaned product.

Information on suitable materials is listed under Material compatibility.

For specific material tests, Borer Chemie AG provides further information on the respective materials or tests customer-specific materials for compatibility with deconex[®] HPC 1202.

You are welcome to contact us for further information regarding material compatibility.

After cleaning, rinse thoroughly with deionised water. Sufficient rinsing ensures residue-free surfaces.

After cleaning with deconex[®] HPC 1202, no additional neutralisation step is required.

deconex[®] HPC 1202 can also be used for the cleaning of components for the following applications:

Maintenance and cleaning of cleaning systems

Thanks to a targeted concentration and exposure time, you can be sure that your cleaning system always reaches a defined condition despite the high degree of use and corresponding contamination, and therefore that the required purity of the components is guaranteed.

Commissioning of new cleaning systems

Ensure that no residue from the production of the cleaning system is present in your process basin / working chamber that could result in third-party contamination.

Depending on the type and amount of contamination, various pre-cleaning operations with deconex[®] HPC products may be required. In this case, we recommend a final rinse with deconex[®] HPC 1202 in order to ensure the standardised baseline requirement for achieving the degree of cleanliness needed.

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Material compatibility

The following materials are suitable for cleaning with deconex $^{\!\otimes}\, HPC$ 1202:

- aluminium
- anodised aluminium (under certain process parameters)
- stainless steel
- silicone wafer
- borosilicate flat glass
- soda lime flat glass
- pure titanium
- titanium alloys
- brass
- bronze
- Co-Cr-Mo
- polyethylene (HDPE)
- polyethylene (UHMW-PE)
- polypropylene (PP)
- nylon
- PEEK
- fibre composite materials
- bioceramics

Basically all water-resistant types of aluminium, brass and bronze can be cleaned with deconex[®] HPC 1202. Given the variety of corresponding alloys, we recommend for safety reasons that the resistance of the materials to deconex[®] HPC 1202 be tested at the specific application temperature and concentration.

For materials not mentioned above we recommend compatibility testing, or please consult Borer Chemie AG.

deconex $^{\otimes}$ HPC 1202 is not suitable for materials that are not resistant to water.

Additional information

The containers, seals and labels are made from recyclable polyethylene.

For information concerning safety at work, storage and waste disposal/effluent, please consult the corresponding safety data sheet.

Benefit from our expertise! Please contact us for practical information regarding your specific application.

Request more information about this offer by e-mail from: industry@borer.ch

Availability

Please ask your local representative about available container sizes.

Manufacturer:

Borer Chemie AG

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