

## Biosilico AC.PC.0198

(Formerly known as AC.PC00.0198)

### Advanced Materials for Paints & Coatings

**Biosilico AC.PC.0198** is copper nanoparticles infused bio-based silica, synthesized from Rice Husk and used as Antimicrobial and Antiviral additive for Paints & Coatings.

#### Product Benefits

- Copper NP infused anti-microbial additive with anti-microbial efficiency of up to 99.99%, tested in accordance with JIS Z 2801 for gram positive, gram negative, E.coli and Staphylococcus aureus.
- Suitable for applications in anti-microbial coatings, anti-viral and anti-odor coatings.
- Imparts exceptional long term anti-microbial activity with odor control with excellent resistance to oxidation of copper nanoparticles.
- Best equipped for interior architectural coatings for Residences and Medical facility.
- Enhances sterilization in textiles, fibers and PPE and medical equipment, in turn results into reduced usage of washing resources.
- Incorporate Antimicrobial properties to conventional Plastic composites.
- Enhances shelf-life of food packaging and sterilization of kitchen utensils and kitchen tops
- Bio-degradable & eco-friendly materials from bio-based source and inert to chemicals.

#### Properties

PROPERTIES	UNIT	SPECIFICATION
State		Amorphous – Micron powder
Appearance		Light gray
Loss on Drying (2h in 105 °C)	%	Max 5.0
Tamped density	g/cm <sup>3</sup>	approx. 0.2
pH		5.0 - 8.0
D(50)*	µm	3.0 - 10.0
Surface area*	m <sup>2</sup> /g	150 - 350
Anti-Microbial Strength	%	99.99

At time of packaging.  
\* Before surface modified

#### Product Information



ISO 9001:2015

QMS granted by Universal GmbH



#### Packaging

**Biosilico AC.PC.0198** is supplied in 15 kg bag.

#### Storage and Handling

- Store in closed containers under dry condition; protect the material from volatile substances and handle sensibly to minimize dust generation.
- This product should be used within 24 months from production date.

#### Safety Data

##### Warning

- Keep away from source of ignition to avoid spreading dust.
- Use with adequate ventilation.
- Drying and abrasive properties may cause skin, eye or respiratory irritation.
- Avoid inhalation or prolonged contact with skin.
- If dusty conditions prevail, use gloves and adequate respirator.
- Dispose of in accordance with state and local requirement.
- See MSDS for more information.

##### First Aid

- Follow the rules of personal hygiene on dust inhalation and/or eye contact.

##### After eye contact

- Remove contact lens if have.
- Flush open eyes with large quantity running water for at least 15 minutes.
- Call for medical care if symptoms persist.

##### After skin contact

- Flush skin with water at least 15 minutes
- Call for medical care if symptoms persist.

##### After inhalation

- Supply fresh air
- Call for medical care if complaints
- Do CPR if stop breathing.

##### After swallowing

- Call for medical care
- Do not induce vomiting.

