



# Technical Data Sheet

## Aqua-Tech (55 Series) Anti-Microbial Silk Emulsion

Issued: 08/04/2020  
2 pages

### Product Description

A specially formulated silk/satin waterbased coating which contains anti-bacterial agents that are designed to provide invisible protection and a “safe-to-touch” surface, offering a broad spectrum of activity covering Gram-positive and Gram-negative bacteria, fungi and viruses.

### Application

- Sheetfed offset via coating unit (anilox or roller coater systems).
- Drying conditions required: IR and Hot Air circulation.
- Inline (wet-on-wet), over conventional inks
- Offline over conventional inks (wet-on-dry)

### Product specification

- Viscosity: 35-45secs Din4@25C
- Friction (Slip): 0.30-0.40static 0.25-0.35dynamic
- Heat Resistance: ~130°C
- Single or Double sided? Both

### Properties

Gloss	
Drying	
Rub/Scuff Resistance	
Block Resistance	
Crazing Resistance	

### Post-Processing suitability

Gluing	
Hot Foil Stamping	
UV Varnishing	
Laminating	

### Substrate

- Recommended for use on most coated paper and boards substrates.

- May be used on low porosity substrates such as metallised boards, plastics, or films, however, always tested suitability to inks and substrate for each new case.
- For uncoated papers/board, and papers below 115gsm suitability can vary depending on application.
- Offers added value to medicinal and pharmaceutical packaging, and any other packaging that is handled repeatedly by multiple persons.

### Food printing status

- This formulation has not been independently tested or approved for direct contact with foodstuffs or where Low Migration is a requirement, however is formulated in line with current approved products of ours in terms of chemical content.
- The anti-bacterial additives incorporated are included in the European Food Safety Authority (EFSA) provisional list of substances and is therefore permitted for current use in food contact applications, with a specific migration limit of 0.05mg/kg, and have been tested for migration with food packaging with excellent results.
- If used for food packaging a migration analysis according to regional/national/international food law should be conducted on the completed packaging and it is ultimately the responsibility of the end producer who brings the product into circulation to ensure it meets the relevant regulations.

### Recommendations

- MUST BE STIRRED THOROUGHLY BEFORE EACH USE TO OPTIMIZE ANTI-BACTERIAL ACTION
- APPLY A MINIMUM 5MICRON WET FILM WEIGHT
- Inks should ideally be alkali resistant and wax free for optimum results. Testing ink suitability prior to production runs is recommended.



## Makes print perfect

- Test substrate suitability and check over various inks and absorbency can vary depending on the ink choice and colour as well as substrate permeability, that may appear as an insufficiently dried system or poor rub resistance.
- Check viscosity and adjust with water if absolutely necessary.
- Maximum recommended stack temperature = 36°C.
- Ensure return pipes are positioned correctly to avoid unnecessary aeration of the coating prior to use. Down the side of the barrel and slightly beneath the coating surface is ideal – also check no holes are evident in the pipeline.
- As a measure of best practice and if possible avoid coating glue folds as a greater bond can usually be achieved over unprinted paper/board.
- For Gluing/Foiling/Laminating/UV Varnishing best results are a combination of many factors so always test initial acceptance for any given job and allow the prints to completely dry before conducting these – minimum 24hours later.
- Avoid polluting the coating with washing fluids or other coatings. Flush coating system with water and cleaning agents when changing from one coating to another.

### Packaging

- 25kg open top bucket, 125kg, 150kg, 200kg.

### Storage and Shelf Life

- Store between 5-30°C ideally.
- Protect from freezing.
- If left unopened and kept in the correct conditions this product has a recommended shelf life of 12 months from date of manufacture.

### Note

*The information contained in this data sheet corresponds with our current knowledge and experience. The liability for the application and processing of our products lies with the buyer, who is also responsible for observing the third party rights. We reserve the right to alter any of these details as a result of technical or manufacturing developments.*

*This datasheet does not claim to be complete.*

*\*For full details relating to regulatory context and efficacy please see separate "REF form"*

*For any further information please contact the technical department at **Inks & Printing Technologies Ltd.***

- After opening use up as soon as possible.
- Replace lids on containers when coating not in use.
- The coating may thicken if stored incorrectly or for a longer period of time.

### Cleaning

- Clean machines and tools immediately with water. Dried or part-dried residues can be removed with suitable cleaning solutions – please consult our technical department for recommendations.
- Pipelines should be contaminant free before commencing printing so flush through with dedicated emulsion wash as required. Consult our technical team for advice on recommended wash solutions.

### Health and Safety

- Clean immediately with water if on skin or eyes
- If varnish contacts skin, clean well with soap and water. Contaminated clothing should be removed as soon as possible.
- All materials used in the manufacture of this product meet the requirements of EU Legislation Regulation (EC) No 1907/2006 REACH, where appropriate.
- Consult the MSDS for more detailed information.
- Do not allow coating to enter the water system.
- Dispose of according to local/regional/national regulations concerning disposal of hazardous waste.

**0845 603 4005**

**www.inkandprint.com**