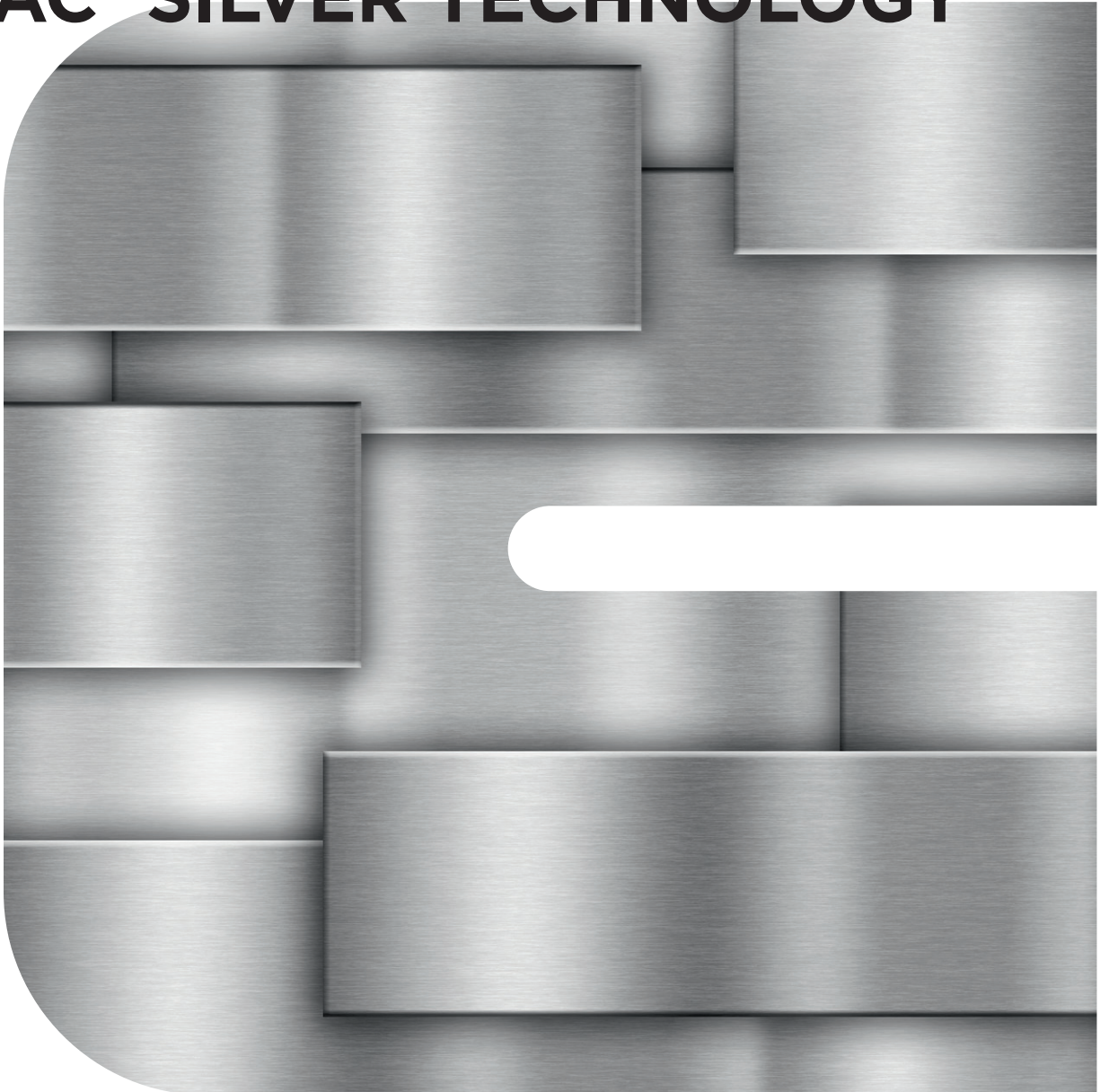


The versatile  
antimicrobial additive  
**JMAC<sup>®</sup> SILVER TECHNOLOGY**



# JMAC® SILVER TECHNOLOGY

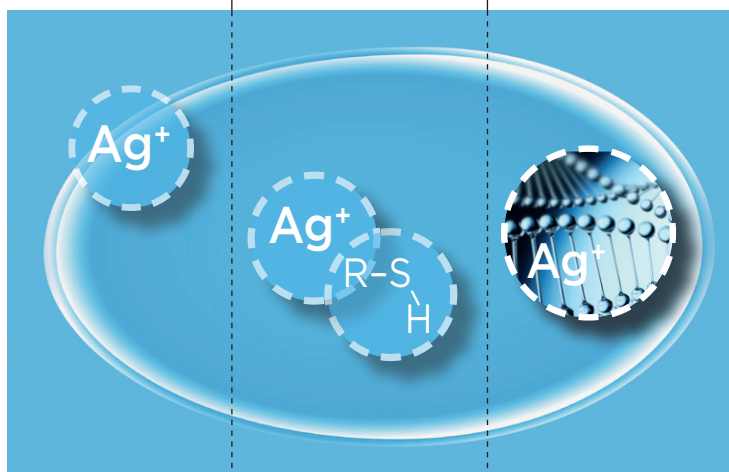
## COMPOSITE OF SILVER CHLORIDE ON TITANIUM DIOXIDE.

### BENEFITS

- Versatile additive for Paints & Coatings applications
- Wide spectrum of activity – effective against bacteria, fungi and yeast
- Safe handling and safe use
- Controlled release over a long period of time
- Effective at very low concentrations
- Use over an exceptionally wide pH range
- Excellent temperature stability
- Non skin sensitising
- Does not contain formaldehyde and isothiazolinones
- In Compliance with EcoLabels
- Various indirect food contact approvals (E.g. FDA, EFSA)
- Supported by Clariant for Biocidal Products Regulation No 528/2012

### MODE OF ACTION

1. Silver ions bind non-specifically to cell surfaces causing disruption to the membrane
2. Silver ions combine with specific groups in the cell enzymes
3. Silver ions react with the DNA, preventing replication



### PRODUCT INFORMATION

PRODUCT	ACTIVE INGREDIENTS	PHYSICAL FORM	PH STABILITY	TEMPERATURE STABILITY	RECOMMENDED USE LEVEL [%]	VOC FREE	BLUE ANGEL [RAL UZ-102]
JMAC Composite PG	AgCl on TiO2	Powder	4-12	max. 300°C	0.005 - 0.3	•	•
JMAC LP 10	AgCl on TiO2	Dispersion	4-12	max. 100°C	0.05 - 0.5		•
JMAC S 10	AgCl on TiO2	Powder	4-12	max. 300°C	0.05 - 1.0	•	•

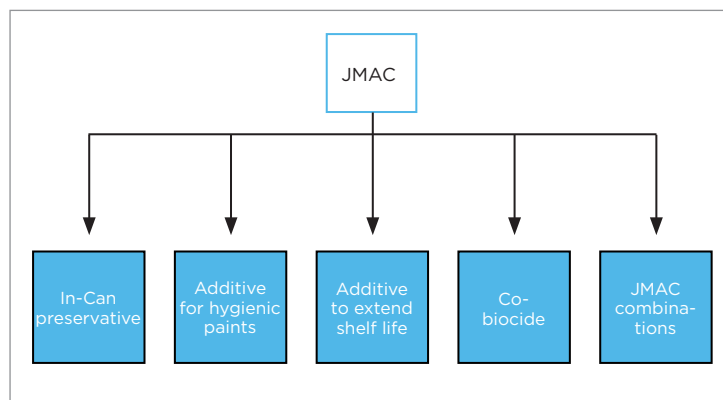
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### APPLICATION



**In-Can preservative:** Provides complete in-can protection of water based products at very low dose level.

**Additive for hygienic paints:** JMAC releases silver ions on demand, to inhibit bacterial growth on surfaces where high hygienic standards are required.

**Additive to extend shelf life:** Added value to your paint formulation to extend the shelf life of your product.

**Co-Biocide:** JMAC is the right choice as co-biocide when use of biocidal actives for a formulation is limited due to regulatory requirements or chemical stability reasons.

**JMAC combinations:** Clariant offers innovative, ready-to-use blends based on the JMAC technology providing exceptional protection.

[www.clariant.com](http://www.clariant.com)  
[www.industrial-biocides.clariant.com](http://www.industrial-biocides.clariant.com)

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**Use biocides safely. Always read the label and product information before use**