



# V4221M



## Description

SigNature® molecular ink, delivered with a Videojet 1860M, transforms the inkjet code into a comprehensive supply chain certification solution. Unique to each customer, SigNature molecular ink is created with the addition of a unique, secure molecular tag. These tags facilitate traceability of products and packaging, enabling such claims as the forensic certification of origin, authenticity, provenance, quality, ethics, integrity, or sustainability.

## Benefits

- Unique, secure, and durable tag
- Forensic-level verification
- Low odor
- MEK-free, acetone-free, ethanol-free
- Based on Videojet 16-8700 / V421 legacy ink formulas (aerospace approved)
- Caustic removable
- Some acetone resistance
- Resistant to acids, Mil Spec Solvent C, mineral spirits, and oils

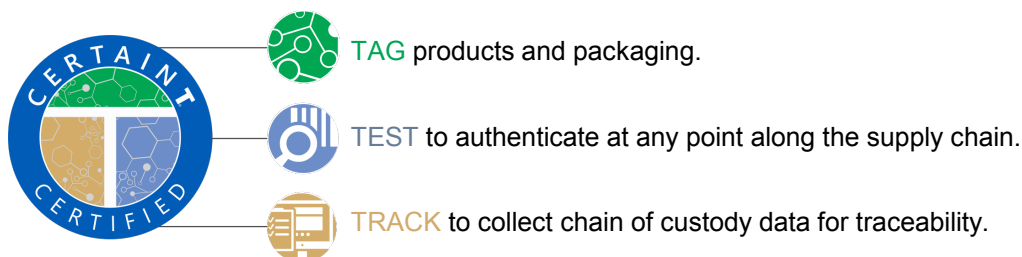
## Applications

This ink is well-suited for odor-sensitive applications commonly found in baked food, tobacco, and coffee packaging, as well as baby, health, beauty, and personal care markets. Can also be used in critical component and aerospace applications where 16-8700 or V421 are already qualified. Delivers excellent adhesion to a wide variety of substrates including: aluminum, glass, polystyrene, polycarbonate, polyester, steel, and nylon.

## The CertainT® Solution

Applied DNA's CertainT solution features the combination of bio and information technologies, creating sound, secure and transparent supply and distribution environments. Through the use of sophisticated TAG, TEST and TRACK tools, verification of product integrity is made possible with absolute certainty.

Products and packages TAGGED with V4221M molecular ink can be easily incorporated into a CertainT program designed to troubleshoot, monitor or elevate supply and distribution chain integrity.



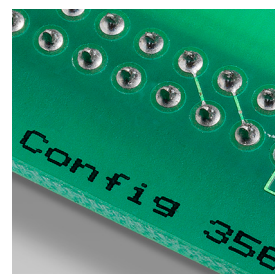
Personal care



Critical components



Food and beverages



Electronics

Learn more at [adnas.com/inkjet](https://adnas.com/inkjet) or [videojet.com/SigNatureInk](https://videojet.com/SigNatureInk)

# V4221M



## Specifications

| Product | Product Type | Color                    | Solvent Type | Container Size | Shelf life |
|---------|--------------|--------------------------|--------------|----------------|------------|
| V4221M  | Ink          | Black                    | Methanol     | 1000 ml (-L)   | 18 months* |
| V7207M  | Make-up      | Colorless to pale yellow | Methanol     | 1000 ml (-L)   | 24 months* |
| V907    | Cleaner      | Colorless to pale yellow | Methanol     | 1 liter (-Q)   | 30 months* |

**Storage** \*Store between 2°C and 35°C.

## Printer Parameters

| Qualified Models | Operating Temperature | Operating Humidity | Nozzle Compatibility |
|------------------|-----------------------|--------------------|----------------------|
| 1860M            | 5-45°C**              | 10-90%**           | 60µm, 70µm pending   |

**Special Operating Requirements** \*\*Air Drier Kit Mandatory – all conditions

## Certifications and Approvals

### Heavy Metals\*\*\*

V4221M ink meets the requirements of CONEG model legislation including 94/62/EC. For more information, refer to Knowledge Article 1153.

### RoHS/WEEE\*\*\*

V4221M ink meets the requirements of the RoHS 2 Directive 2011/65/EU and Directive (EU) 2015/863. For more information, refer to Knowledge Article 1159.

### REACH\*\*\*

V4221M ink is in compliance with EU Regulation (EC) No. 1907/2006 as amended. For more information, refer to Knowledge Article 1156.

### Food Packaging\*\*\*

V4221M ink may be used on the non-food contact side of food packaging. The packaging must provide a barrier between the ink and the food. When used in this manner, the inks are in compliance per 21 CFR 170.3(e)(1), Regulation (EC) No. 10/2011, and Regulation (EC) No. 2023/2006. For more information, refer to Knowledge Article 7921.

### Other\*\*\*

V4221M ink does not contain major allergens, animal based raw materials, nor organisms, genetically modified or not. For more information refer to Knowledge Articles 1148, 1190, and 1152.

\*\*\*Environmental, Health, Safety, and Regulatory information can change without notice, consult the current Safety Data Sheet (SDS) which is available on the Videojet website. Knowledge Articles are available by calling or emailing Videojet.

Call **+47 9041 8340**

Email **post.no@videojet.com**

Or visit **www.videojet.no**

Videojet Technologies Norway  
Kirkegårdsveien 45 3616 Kongsberg



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Applied DNA Sciences, Inc.  
call **631-240-8823** visit **adnas.com/inkjet**

