



Continuous Inkjet

## Videojet® 1580 inks and fluids





**“Our chemically-advanced  
and proven inks are  
designed for today’s  
applications and  
production environments.**

**We’ll stick our  
reputation on it!”**



# Selection, quality & expertise

Over 40 years of ink and fluid technology, starting with those created for the first commercial inkjet printer, goes into every ink that Videojet formulates and delivers today. With specially formulated inks for the 1580 CIJ printer, Videojet can match the ideal ink for your application.

## Uptime Advantage

Achieve unparalleled uptime and improved productivity through our specially formulated inks for the 1580 continuous inkjet printer. Benefit from no mess, no waste and no mistakes with the Videojet Smart Cartridge™ featuring an embedded microchip.

## Code Assurance

Reduce operator error through advanced Code Assurance functionality, ensuring consistent codes throughout the lifetime of your product.

## Simple Usability

The SIMPLiCiTY™ user interface reduces operator printer interactions, helping to eliminate potential user errors through an intuitive, 10-inch touchscreen display.

## Built-in Productivity

Analyse your individual use patterns and receive printer improvement opportunities via on-screen alerts. Videojet continually develops new ink formulations to help you meet your changing production needs, helping to improve your operations today, tomorrow and in the future.





# Optimal printer performance achieved through superior ink and fluid formations

## Videojet ink development

Long-standing supplier relationships and experience in selecting the highest grades of specialised chemicals provide consistent, proven performance.

Chemical stability is constantly monitored and evaluated. In-house analytical laboratories employ sophisticated and analytical equipment to test 100% of ink batches that Videojet produces.

**All inks and fluids pass rigorous development tests that prove their robustness prior to release. Tests include:**

- Printer/ink qualification across a full-range of temperatures
- Accelerated aging
- Raw material and process variation control



“We ensure Inks and their raw materials meet purity and filtration standards to help minimise the risk of contamination that could impede critical printer operation”

**Frank Xiao. Ph.D.**

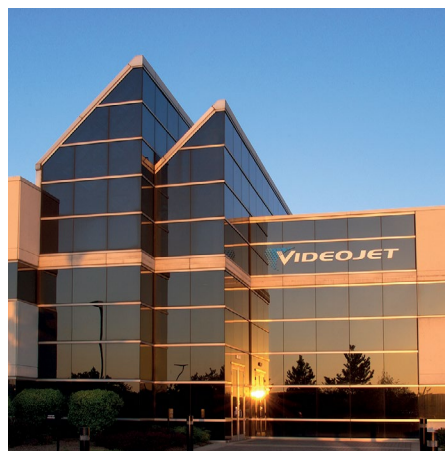
Staff Chemist





## Industry-specific ink formulations:

- Aerospace & Automotive
- Baked Goods
- Beverage
- Candy & Confection
- Chemicals
- Dairy
- Fish & Seafood
- Frozen Prepared Meals
- Fruit & Vegetables
- Meat & Poultry
- Salty Snacks
- Pet Food & Animal Feed
- Personal Care & Cosmetics
- Pharmaceutical & Medical
- Tobacco
- Electronics
- Wire & Cable



## Partner with Videojet

Understanding what customers value, selecting the appropriate inks for applications, and determining how to integrate marking and coding into production processes can be challenging undertakings. Videojet has the experience and technology to assist through all aspects of industrial marking and coding.

With over 345,000 installed printers coding well over a billion products every day, Videojet delivers marking and coding solutions to a wide range of industries and applications.

Videojet experts help customers utilise these solutions to grow market share, increase throughput, improve operational efficiency and meet regulatory requirements.

# Inks for the Videojet 1580 Continuous Inkjet printer

Our 1580 inks have a variety of special properties including: the ability to penetrate a thin layer of condensation, to withstand the pasteurization process, and outstanding adhesion to steel, aluminium, glass, plastics, and wax coated substrates.

Videojet will help you choose the ideal 1580 ink to address your unique application requirements.



## Fast dry



Ideal for rapidly moving production lines including those running web-based films and production lines that have tight material handling control, these Videojet inks dry and cure very quickly. They incorporate special fast-dry solvents and compatible resin technology necessary when there is little time between each code and when those codes come into contact with typical conveyor components and each other.

**Ideal for:** *high speed consumer packaged goods including food packages using films and stretch/shrink wraps; for decoration and branding.*

## Retort & thermochromic Black to Blue/Dark Red to Light Red



These inks are designed to produce a colour-changing quality assurance indicator to alert the manufacturer that food has passed through a critical retort process. Cooking sterilization temperatures between 115-130°C (239-266°F) for 20-45 minutes or longer to preserve flavour and texture. No MEK ink formulas are available.

**Ideal for:** *soups, vegetables, sauces in aluminium and tin-free steel cans; chopped meat in polyester, nylon, aluminium, and polypropylene film laminated pouches; single serving plastic tubs and trays.*



## Condensation-resistant/ caustic-removable



When applied immediately after the cold-filling process, these inks penetrate the condensation layer to adhere to beverage cans and bottles. Videojet condensation-resistant inks are durable during pasteurization and refrigeration/re-cooling. Videojet caustic-removable inks are soluble in common caustic wash solvents used in the recycling/refilling process. Certain inks can perform as a single-solution for bottlers producing a mix of returnable and non-returnable beverages.

**Ideal for:** *bottles, cans and bulk water containers.*

---

## Solvent/chemical-resistant; heat cured



When subjected to temperatures around 175°C (350°F) for 30 minutes, codes printed with Videojet solvent/chemical-resistant inks become cured and resistant to offsetting/transfer and removal by steam, general abrasion, and many solvents.

**Ideal for:** *automotive and aerospace parts exposed to environmental solvents including, oil, lubricating fluids, antifreeze, and diesel fuel; electronic components and parts (extruded and molded connectors and housings subjected to cleaning solvents and defluxers); personal care products containing certain soaps and isopropyl alcohol.*

---

## Visible/invisible fluorescing UV readable



Packages, bottles and certain products may require discrete fluorescing codes and brand information that are only visible under UV lighting. An unobtrusive solution for coding and tracking products through the supply chain, invisible fluorescing inks are also employed where the available package/label "real estate" is limited or is obscured by package graphics or secondary codes.

Videojet also offers a UV fluorescent ink that's been specially formulated for dual-purpose applications that require both machine readable fluorescent and human readable codes.

**Ideal for:** *automotive parts, aerosol cans, pharmaceuticals, retort processed food containers and cosmetic packaging.*

---

## Cosmetic grade



This ink is a wetness-indicating / washable blue Ethanol ink that becomes invisible, and dissolves completely, when exposed to water or other water-based liquids. It is primarily used as a visual wetness indicator on absorbent diapers and incontinence products. It may also be used on trays or batch containers that require very easy removal using a simple water solution.

**Ideal for:** *personal care products, temporary in-plant batch or lot identification onto trays or batch containers*

---

# Inks for the Videojet 1580 Continuous Inkjet printer



## Oil penetrating

Metal automotive parts and extruded metal pipe sometimes contain lubricants that aid in their forming, bending or machining processes. Along with these lubricants, oils used as rust-preventatives can inhibit ink adhesion unless special ink chemistry is employed. Unique ink solvents and resins in Videojet oil penetrating inks help the inks to achieve excellent adherence through these protective layers.

**Ideal for:** *automotive parts, formed metal extrusions and stampings, and plastic components formed using mould release compounds.*

---



## iQMark™ food packaging flexible film/plastics

BOPP, HDPE, PE, PVC, PP, PET, acrylic, ABS, polystyrene and treated polyethylene film can all present challenges to an ink's adhesion due to their inherent "slick" surface properties and use of various plasticisers. The formulation of Videojet flexible films/plastics inks focuses on the toughest of these materials to provide optimal adhesion and code durability.

**Ideal for:** *food packaging bags and pouches, cups and tubs, shrink films, cosmetic and chemical bottles.*

---



## Heat/steam cure

Extruded rubber products, such as hoses, belts and tyres, undergo a unique two-step manufacturing process. After extrusion, they are cured (vulcanized) for approximately 30 minutes at 175°C (350°F) using pressurized steam heat. Many other inks fade or disappear during this process while Videojet heat/steam cure inks provide good colour retention and adhesion throughout the curing process and beyond.

**Ideal for:** *automotive radiator hoses, transmission belts, tyres, and extruded butyl rubber moldings.*

---



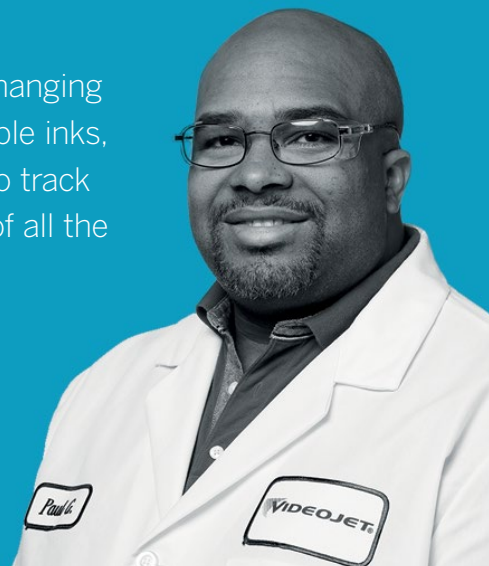
## iQMark™ coding

iQMark™ supplies are responsibly designed and manufactured to maximise contrast, adhesion and uptime while meeting safety, environmental and regulatory requirements. Videojet partners with manufacturers to help them meet their corporate responsibility goals by providing a comprehensive range of supplies.

The iQMark™ line of inks, make-ups, cleaners and ribbons help Videojet communicate with manufacturers using common terminology to identify supplies that help meet their goals.

“The world is always changing and to formulate reliable inks, we’ve built a system to track the 40+ year history of all the raw materials we use”

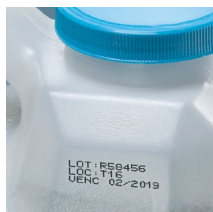
**John Garrett. B.S.**  
Sr. Chemist. Substrate analysis



## iQMark™ low-odour

Certain consumable goods and foods tend to acquire odours from their environment during manufacturing, packaging and coding processes. To address this, Videojet low-odour inks have been specially formulated with solvents and compatible resins/dyes that are virtually odour free. They are designed to reduce the need for air venting and offer the least impactful coding process possible.

**Ideal for:** *bread and pastry packaging and other food packages that are coded in close proximity to the food filling process and tobacco products packaging.*



## iQMark™ no MEK

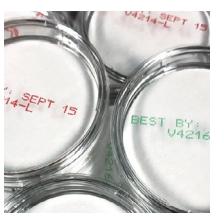
Even though MEK is not classified as a HAP (hazardous air pollutant) nor an ODC (ozone depleting chemical), local regulations and preferences can limit use of MEK-based inks. The MEK-free ink range matches to a wide variety of surfaces, coding processes and durability requirements. Some of these inks can also offer increased printer operating efficiency to further reduce solvent consumption.

**Ideal for:** *food containers, cans, pouches, bottles, etc., comprised of LDPE, HDPE, polypropylene, polystyrene, PVC, ABS, polycarbonate, stainless steel, tinplate, aluminium and glass.*

## Coloured inks

Varying the code colour is useful to identify and segment products due to a variety of applications, including date sensitive inventory, stock rotation, differing quality grades, or differing regulatory standards. With fast dry times the coloured inks offers excellent adhesion to plastic, metal and glass substrates.

**Ideal for:** *metal part marking, food packaging, flexible film and electronic components*

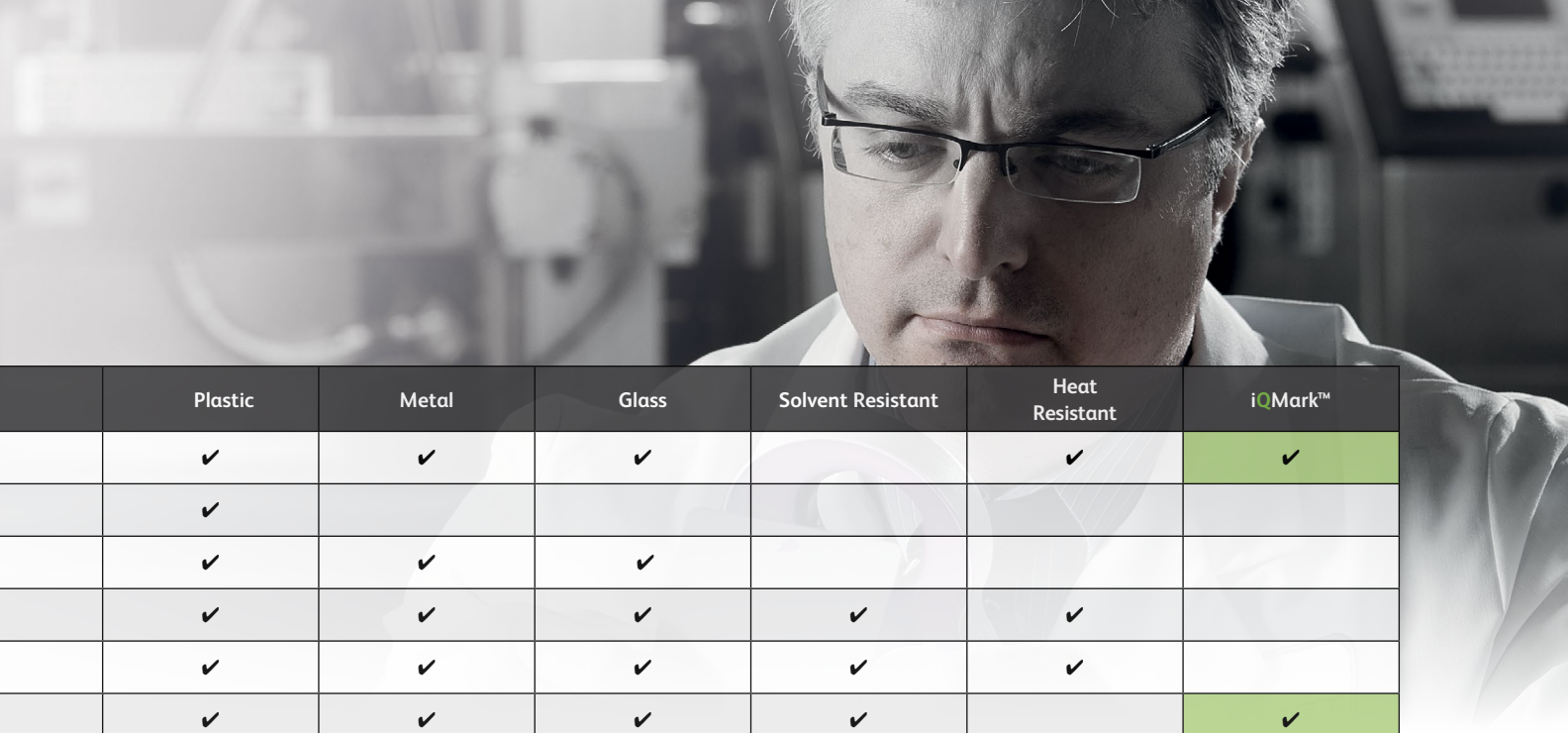


# Videojet 1580

## iQMark™ Ink Chart

1580 Inks	Ink colour	Solvent Type	Application
V4201	Black	MEK	Flexible food packaging.
V4202	Dark Gray	MEK	Extruded PVC wire and cable.
V4204	Blue	MEK	Colour differentiation.
V4210	Black	MEK	Condensation, pasteurization, and retort resistant.
V4210A	Black	MEK	No ethanol. Condensation, pasteurization, and retort resistant.
V4211	Black	MEK	Flexible food packaging, including BOPP.
V4212	Black	MEK	Easiest to remove for returnable glass bottles.
V4214	Red	MEK	Solvents, automotive fluids, and soap resistant.
V4215	Purple	Ethanol / MEK	Automotive/aerospace metal parts.
V4216	Green	MEK	Colour differentiation.
V4218	Black	MEK	Oil and condensation penetrating on flexible food packaging.
V4220	Black	MEK	Most durable for returnable glass bottles.
V4221	Black	Methanol	Aerospace parts. Solvent resistant. Caustic removable.
V4222	Red	Methanol	Solvent resistant. Caustic removable.
V4235	Black	MEK	Electronic components. Isopropanol resistant.
V4236	Black	MEK	No halogens. Electronic components. Isopropanol resistant.
V4237	Black	MEK	Retort resistant. Oil penetrating.
V4238	Black	MEK / Methanol	Mil Spec solvent resistant after heat cure (30min@150°C).
V4251	Black	Methanol / Water	Returnable plastic containers. Caustic removable.
V4248	Black	MEK	Meets MIL Std 833 and 202G Method 215K after heat cure (30min@150°C).
V4258	Pink/Fluorescent	MEK	Visible and fluoresces @590nm. Illuminate @365nm.
V4259	Clear/Fluorescent	MEK	Invisible and fluoresces @433 nm. Illuminate @365nm.
V4260	Black	Ethanol	Low odour. Low make-up consumption.
V4262	Black	Ethanol/IPAc	Low odour. Flexible food packaging.
V4269	Black	Acetone/Ethanol	Flexible food packaging. Retort resistant.
V4274	Black > Blue	Pentanone/Ethanol	Retort, cooked food. Excellent colour change.
V4275	Black > Blue	Pentanone/Ethanol	Retort, cooked food. Excellent colour change.
V4276	Dk Red > Lt Red	Pentanone/Ethanol	Retort, cooked food. Excellent colour change.
V4299	Cyan Blue	Ethanol	Wetness indicator for diapers. Water removable.





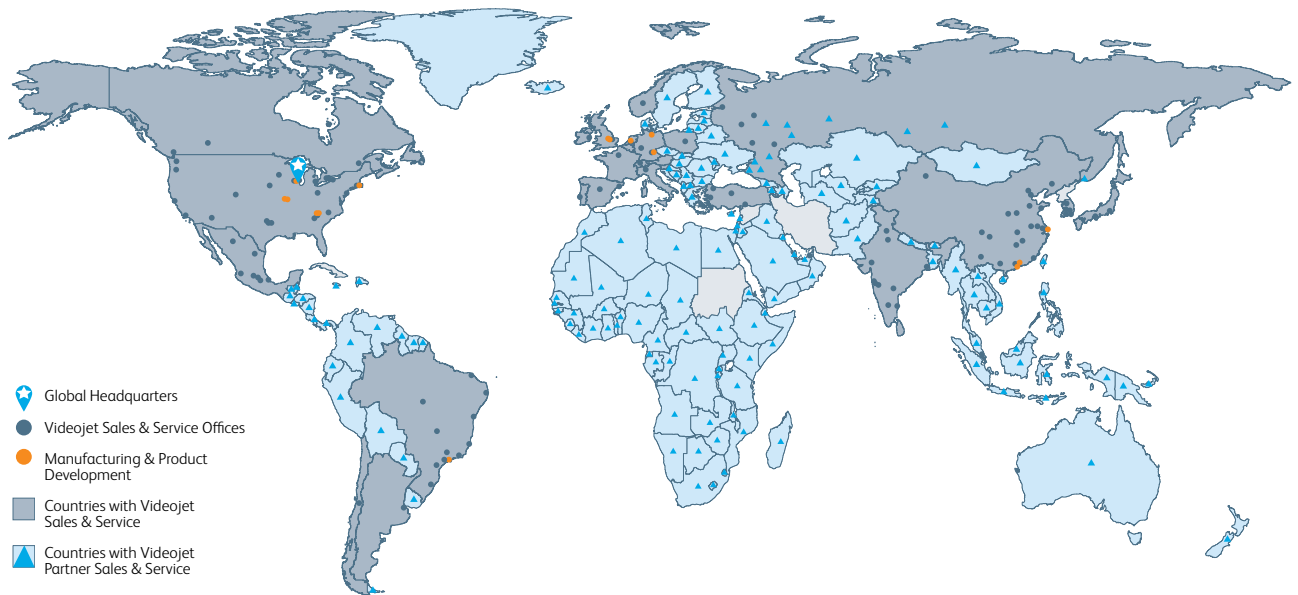
	Plastic	Metal	Glass	Solvent Resistant	Heat Resistant	iQMark™
	✓	✓	✓		✓	✓
	✓					
	✓	✓	✓			
	✓	✓	✓	✓	✓	
	✓	✓	✓	✓	✓	
	✓	✓	✓	✓		✓
	✓	✓	✓	✓	✓	
	✓	✓		✓	✓	
	✓	✓	✓		✓	
	✓	✓	✓			
	✓	✓			✓	✓
	✓	✓	✓	✓	✓	✓
	✓	✓	✓	✓		✓
	✓	✓	✓	✓	✓	✓
		✓	✓	✓	✓	
	✓	✓		✓	✓	
	✓	✓	✓		✓	
	✓	✓	✓	✓	✓	
	✓	✓	✓		✓	✓
		✓		✓	✓	
	✓	✓	✓			
	✓	✓				
	✓	✓			✓	✓
	✓	✓	✓		✓	✓
	✓	✓	✓		✓	✓
	✓	✓	✓	✓	✓	✓
	✓	✓	✓		✓	✓
	✓	✓	✓		✓	✓
				✓		✓

# Peace of mind comes as standard

Videojet Technologies is a world-leader in the product identification market, providing in-line printing, coding, and marking products, application specific fluids, and product LifeCycle Advantage™.

Our goal is to partner with our customers in the consumer packaged goods, pharmaceutical, and industrial goods industries to improve their productivity, to protect and grow their brands, and to stay ahead of industry trends and regulations. With our customer application experts and technology leadership in Continuous Inkjet (CIJ), Thermal Inkjet (TIJ), Laser Marking, Thermal Transfer Overprinting (TTO), case coding and labelling, and wide array printing, Videojet has more than 400,000 printers installed worldwide.

Our customers rely on Videojet products to print on over ten billion products daily. Customer sales, application, service and training support is provided by direct operations with over 4,000 team members in 26 countries worldwide. In addition, Videojet's distribution network includes more than 400 distributors and OEMs, serving 135 countries.



Call us free on **0800 500 3023**  
Email **uksales@videojet.com**  
or visit **www.videojet.co.uk**

Videojet Technologies Ltd.  
4 & 5 Ermine Centre, Huntingdon, Cambridgeshire PE29 6XX / UK

Call us free on **+353 1 450 2833**  
Email **irelandsales@videojet.com**  
or visit **www.videojet.ie**

Videojet Ireland  
C2, South City Business Park, Tallaght, Dublin 24 / Ireland

©2020 Videojet Technologies Inc. — All rights reserved.

Videojet Technologies Inc.'s policy is one of continued product improvement. We reserve the right to alter design and/or specifications without notice.

Part No. SL000670  
br-1580-inks-and-fluids-en-1120

