# 100

Viajet 100 is a specially designed, low viscosity, clear, solvent free, pigment grinding vehicle for dispersing all process colour pigments in a bead or pearl mill to give a finely dispersed & highly stable pigment paste. When this pigment paste is let down in a good letdown system (like let down vehicle Viajet 400), the final ultra violet inkjet inks* have an extremely low viscosity of around 20 Cps at 25°C & maintain the stability of the pigment dispersion.

*These inks are applied exclusively using the Drop on Demand Piezo Inkjet systems.

## Applications

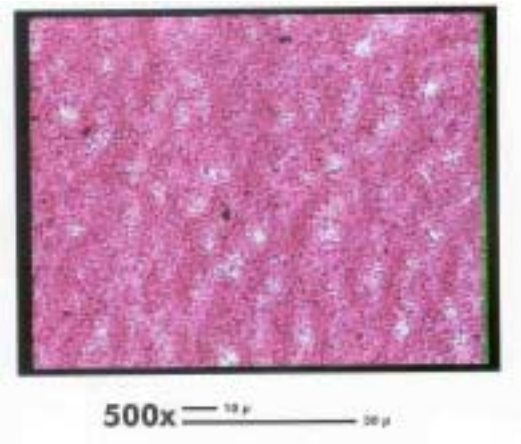
These clear and free flowing vehicles are designed for use

- With all pigments that are used for UV inkjet inks.
- On all types of plastics (including corona treated polyolefins) and coated papers
- In multiple applications like
  - labels and packaging
  - point of sale posters
  - photoimage posters
  - billboards & outdoor panels
  - truckcovers
  - decorative printing

## Performance highlights

***Formulation of the paste***

- Less processing time resulting in
  - Energy saving
  - Lesser bead wear
- Gives pigment dispersion that has a fine particle size distribution.
- Low viscosity paste providing ease of handling and ensuring stability while letting down.
- Low odour
- Low colour




Magnified picture of the magenta pigment dispersed in the vehicle.

***Performance while jetting***

- Very good Jettability
  - Ease of priming
  - No face plate wetting
  - No nozzle loss during printing continuously on long runs
  - No satellite formation
- Good flow and substrate wetting
- High reactivity

***Cured Ink Performance***

- Good adhesion
- Scratch resistance
- Solvent resistance
- High gloss
- No dot gain

## Specifications

| | |
|---|---|
| Percentage solids | 100% |
| Viscosity (Hoppler) @ 25°C | 107 mPas |
| Density @ 21,5°C | 1,09 |
| Colour (Gardner) | 5 |

## Suggested formulation
(for grinding in a bead mill)

| Ingredients | Parts by weight | | | |
|---|---|---|---|---|
| | Yellow | Cyan | Magenta | Black |
| Pigment | 15 | 20 | 22 | 25 |
| Viajet 100 | 84 | 79 | 77 | 74 |
| Stabiliser ( Flourstab UV 1) | 1 | 1 | 1 | 1 |
| Dispersion Synergist (like Solsperse 22000 & 5000) | 0.2 - 0.5 | 0.2 - 0.5 | | |

The ratio of pigment to Viajet 100 should be adapted to have the maximum shear as possible without increasing the temperature of the pigment paste above 60°C.

the pigment to binder ratio shown here is for an oxidised furnace carbon black. In case of a non oxidised standard furnace black the pigment quantity should be much lower (about 15%).

For detailed advise, we have a dedicated technical service, who is available at your service. Kindly contact your local sales representative.

## Standard Packaging

This product is available in the following standard packagings:
- Steel pails open top 25L;
- Steel drum with bunghole 216L;

## Storage & Handling

Care should be taken not to expose radiation curable products to temperatures exceeding 40°C for prolonged periods or to direct sunlight. This might cause uncontrollable polymerization of the product with generation of heat. Storage and handling should be in stainless steel, amber glass, amber polyethylene or baked phenolic lined containers. Do not store this material under an oxygen free atmosphere. Use dry air to displace material removed from the container. This material should not be stored for more than 1 year.

## Precautions

The following is a summary of the precautions to be taken when handling this product. Please refer to the Material safety Data Sheet for further details.

The toxicological properties of this material have not been fully determined. Products of this type can be expected to be eye and skin irritants and have the potential to cause sensitization or other allergic responses.
Appropriate precautions should be taken to avoid eye and skin contact and to avoid inhalation of the aerosols or vapours. Consult the relevant Material Safety Data Sheet for appropriate handling procedures and protective equipment prior to using this or any other material referred to in this bulletin.

See Material Safety Data Sheet for emergency and first aid procedures.