

Technical information

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1. General

NANOXID JET is a family of inkjet inks especially developed for digital printing. **NANOXID JET** is optimized for piezo print heads of the DX4 type (Epson™).

NANOXID JET is available as transparent ink or in different colors (dye or pigment based).

2. Storage and Handling

NANOXID JET is a one-component system. It is recommended to use the inks within of 3 months after production date. The paints should be stored in a cool place (maximum 21 °C) and protected from sunlight.

NANOXID JET is flammable. When using it, do not smoke and stay away from open lighting or other sources of fire, heat or sparks. Do not eat while working with the material. Read the safety data sheet before handling the material.

The cured coating is non-toxic. **NANOXID JET** is recommended for the production of layers conforming to the European Norms for the Safety of Toys, EN 71-3.

For flushing and cleaning the printing heads, a flushing fluid is available. Residue of other inks or water has to be removed completely before filling with **NANOXID JET**.

3. Substrates

NANOXID JET can be used to print on many materials, like metals, glass, ceramics, plastics, leather, textiles...

In order to achieve good adhesion, the surface of the substrate must be free from all foreign agents, such as oil. In addition, a basic pre-cleaning is necessary in order to remove possible layers of oil, dirt or fingerprints, which interfere with adhesion. Therefore, we recommend cleaning the surface immediately before printing with **NANOXID JET**.

4. Application

NANOXID JET is optimized for printing heads DX4. For other printing heads, the product has to be re-designed and optimized.

NANOXID JET can be used without problems at a relative humidity of up to 60%. At higher humidity levels, the forming of the layer may be disturbed. For example, the layer may appear matte. In such a case, it has been shown to be helpful to warm the substrate before application of the ink.

5. Curing

For many applications **NANOXID JET** is sufficiently durable without explicit curing. To achieve solvent resistance, a thermal curing process (160°C – 190°C for 5 – 30 minutes) is recommended.

Exceeding the recommended temperature range may provoke discoloration of the printed inks.
Exceeding the curing time is in most cases uncritical.
The layer continues to harden after the thermal hardening. The final hardness is only reached after a few weeks.

6. Remarks

The data of the present technical data sheet are not contractual and may be amended in line with technological progress relating to the product.
