



Ink Ready Dispersions (IRDs)

Shepherd Technologies has created a CMYK set of low-migration, heat-stable, high-loading inorganic color dispersions suitable for digital printing and thin film systems. We call the products ink ready dispersions (IRDs).

IRDs are inorganic pigment preparations. Delivered as dry powder, high loading dispersions, they contain over 90% inorganic color pigment. The high pigment loading allows for use in a variety of ink and film systems.

Digital inks made with IRDs can be used alone or in combination with organic inks. They can be formulated using typical ink preparation methods.



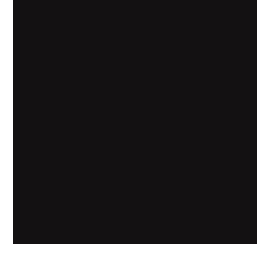
Cyan 561*



Magenta 307*



Yellow 259



Black 980

*Color achieved using white + color ink

Key Features

- Non- migrating, non-bleeding colors
- > 90% color pigment
- Easy to disperse
- High in opacity
- Superior UV/fade resistance
- Increased chemical resistance
- Excellent heat resistance
- Suitable for water, solvent, UV/LED digital inks
- Useful in silicone and sol-gel films

Applications, Suitability and Suggested Uses

IRDs are suitable for water based, solvent based, and UV/LED inks. They can also be used in silicone-based thin coating systems. Some but not all, are suitable for chemically demanding sol-gel coatings and as colorants for digital glass and ceramic inks. A compatibility chart is shown below.

IRD Digital Ink and Thin Film Application Chart

		Cyan 561	Magenta 307	Yellow 259	Black 980
		Suitable for use?			
Digital printing inks	Solvent based inks	Yes	Yes	Yes	Yes
	UV/LED inks	Yes	Yes	Yes	Yes
	Water based inks	Yes	Yes	Yes	Yes
Thin films	Silicone coatings	Yes	Yes	Yes	Yes
	Sol-gel coatings	Yes	Yes	No	Maybe
Digital inks	Glass inks	Yes	Maybe	No	Maybe
	Ceramic inks	Yes	No	No	No