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Water-Resistant Ink/Coating of Titanium Dioxide

LSI Ink is a ready to use water-based, totally inorganic white ink that is designed to produce a tough, abrasion-resistant and water-resistant coating on all substrates. The LSI Ink is ideal for marking and identification of parts, and is usable to 1472 F (800 C). Note that thinner coatings give the best results.

Key Attributes

- Adherent to metals and ceramics with thermal cycles.
- Completely water insoluble after heating to approx. 125 C for 3 hrs.
- Minimal outgassing on heatup ... with water as the species evolved.
- High-temperature stable. Does not glaze, melt, run, become tacky or chalk off.
- Easily applied, like house paint
- Water-based; utensils are readily cleaned up with water [before drying]
- Highest flexibility

Ideal Use

- Marking/Identification/Coding of parts being heat-treated
- Marking/Identification/Coding of tags used at high-temperatures
- Providing a water-insoluble mark or coating on a substrate

Use Notes

- 1. Resuspend the paint
- 2. Clean surface of oil, dirt, scale etc.
- 3. Apply a thin layer by air-spray or brush
- 4. Allow to dry before use. NOTE: Water insolubility requires drying at 125 C or higher. Can be achieved by spraying onto a warm substrate or using heat lamp or dryer.

Safety Information

- Consult SDS before use.
- Avoid breathing of spray/vapors.
- For industrial use only.
- Avoid Freezing



Specifications

Active Ingredients

	110_{2} , $Li_{2}O$, SiO_{2}
Max Use Temperature	>1472 F/ >800 C
Use Atmosphere	All
Fired Composition	Proprietary
Liquid Carrier	Water
Brookfield Viscosity (cps)	167-227 @2/60
Specific Gravity	1.00
Color	White
Shelf Life (months)	>12
Coverage (ft2/gal)	to 400
Coating pH	10-11
H F R Ratings	1-0-0
Substrate Use	All

Other: Water Resistance

After ambient-temperature drying ... Low

After 125 C, 3 hrs... High

Sizes and colors

LSI Ink is a white-colored paint. Standard Sizes:

1 gallon pail

5 gallon pail

CAUTION: DO NOT CONTACT WET COATINGS WITH MOLTEN METAL.

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