

YGS INK

(FOR TOUCH PANEL : CURABLE AT LOW TEMPERATURE)

INTRODUCTIONS

YGS INK was developed for **the window frame of touch panel**. YGS dries at low temperature and its opacity and insulation properties are excellent. YGS adheres to hard-coated surface as well as tempered glass. As it dries at 80 degrees Celsius, it is suitable for the materials such as hard-coated PMMA and PC that do not have good heat-resistance.

CHARACTERISTICS

- Good adhesion can be obtained on tempered glass and hard-coated surface by the drying at low temperature (80°C).
- The opacity is better than that of other ink series for glass.
- Non-yellowing matt finish.

APPLICATIONS

Tempered glass, hard-coated surface, thermo-setting resin, aluminum, heat-resistant plastics such as polyester film, polycarbonate

HOW TO USE

< Drying at low temperature (80°C) >

- YGS Ink : 100
- Hardener YGS-50 : 10
- Tetoron thinner : 10 - 20

* Pot life of the mixture : 1 - 4 hours at 25°C

< Drying for long pot life (120°C) >

- YGS Ink : 100
- Hardener YGS-90 : 15
- Additive JA-1080 : 1 - 5
- Tetoron thinner : 5 - 15

* Pot life of the mixture : 8 hours at 25°C

DRYING

20 - 60 minutes at recommended drying temperature

STENCIL & WASHING UP

Use photo-stencil. Vinyl cleaning thinner is recommended for washing up.

COLOR RANGE AND TYPE OF PACKING

07 OPAQUE WHITE, 92 OPAQUE BLACK, 1kg can

PROPERTIES

- Ink : YGS INK 92 OPAQUE BLACK
- Hardener : YGS-50 (10 parts)
- Substrate : tempered glass
- Mesh : 300 meshes per inch
- Drying temperature : 80°C 30min

| TEST ITEMS | TEST METHODS | RESULTS |
|---|--------------------------------|-----------------------------|
| Heat/humidity resistance | 65°C, 95%, 72 hours | No problem |
| Boiling resistance | 1 hour | No problem |
| Acid resistance | 5% H2SO4 solution. 40°C×5 min. | No problem |
| Alkali resistance | 5% NaOH solution. 40°C×5 min. | No problem |
| Alcohol resistance | IPA rubbing with 1-kg-load | No problem by 50 rubs |
| Yellowing resistance (07 OPAQUE WHITE) | 250°C×30 min. | Approx.ΔE=1.0 |
| Transmittance density | | 5.5 |
| Resistance value | 100V | $1.0 \times 10^{14} \Omega$ |

PROPERTIES -2

| INK / SPEC | | YGS INK 92 OPAQUE BLACK | | |
|-----------------------|-------------|-----------------------------|-----------------------------|-----------------------------|
| | | Hardener : YGS-50(10parts) | | Hardener : YGS-90(15parts) |
| | | - | | Additive : JA-1080(5parts) |
| Pot life (25°C) | | 1~4 hours | | 8 hours |
| Transmittance density | | 5.5 | | 5.9 |
| Drying | | 80°C30min | 120°C30min | 120°C30min |
| Initial adhesion | next day | fair | good | good |
| Boiling resistance | 1hour | good | good | good |
| Warm-water resistance | 80°C4hours | good | good | good |
| Acid resistance | 5% H2SO4 | good | good | good |
| Alkali resistance | 5% NaOH | good | good | good |
| Alcohol resistance | IPA rubbing | 50times | >100times | >100times |
| Resistance value | 100V | $1.0 \times 10^{14} \Omega$ | $1.0 \times 10^{14} \Omega$ | $1.0 \times 10^{14} \Omega$ |

1. Evaluation of adhesion : good=no peel-off with nail , fair=peeled-off with strong scratch
2. The mixture of ink and hardener becomes viscous with time, which leads to poor printability and degrading properties. Hardener YGS-90 has the advantage over YGS-50 due to its longer pot life of 8 hours.

PRECAUTIONS

1. The above results were obtained at our lab test and not guaranteed information.
2. This ink is subject to the change of specification by the further improvement...
3. Please ask our sales department for the samples.