

Pigment Technical Data Sheet

Ink

GP Series

Glass Color(Pigment) for Glassware

FIELD OF APPLICATION

Substrates

Soda Lime Glass

Field of Use

GP series is designed to print on glassware, such as lamp glass, cosmetic & beverage bottles and daily glass dinnerware. It is suitable for soda lime glass.

CHARACTERISTICS

It can be used in transfer printing, direct printing and hand painting.

This glossy, physically drying and chemical reactive screen printing ink exhibits good mechanical & chemical resistance as well as good flexibility and adhesion. Excellent printability and stable in color matching. It can be used in transfer printing, direct printing and hand painting.

Paste first stage viscosity are 300-500Pa s (Rion (VT-04)24 C),and when mixed with

advised medium to 1-3%,it will maintain 180±20 Pa s (Rion(VT-04)/24 C). Select the squeeze of 60-70 shore hardness. Gap between the screen and glass substrate should be between 3-6mm.Minimum squeeze pressure required to transfer the ink to the glass or transfer film is recommended. Wet film thickness is 25-35 microns. Check the printing quality before it send for final firing.

CLEANER

Use TP-65 for cleaning the screen /washing up.

RANGE OF COLORS Basic Colors

HOW TO USE

Water wash the glass to remove impurities and air dry it thoroughly to ready the glass for printing. Mesh Recommended- 200-250 Mesh :Nylon ,Polyester. Suitable temperature of printing room is 25±2 C,the humidity should not be over

Color

Black	Green	
White	Brown	
Red	Dark red	
Yellow	Orange	
Cobalt Blue	Sky blue	
Fruit Green	Metallic gold	
Etch	Metallic silver	

(1)



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(1) 0000 series (lead , cadmium glass color)

Firing temperature:520-580 °C .

Firing time: 60-90 minutes (keep it 10mins at peak temperature)

Firing temperature:680-730°C

Firing time: 20 minutes (for tempering glass)

Acid and alkali resistance:Weakly acid and alkali resistance

Not suitable for recyclable bottlers and tableware.

(2) 2000 series (lead , cadmium glass color)

Suitable for glass table ware, wine bottles, milk bottles.

Firing temperature:580-630 °C .

Firing time: 60-90 minutes cold to cold (keep it 10mins at peak temperature)

Firing temperature:680-730°C

Firing time: 20 minutes (for tempering glass)

Acid and alkali resistance:Good acid and alkali resistance

No visible color change after immerse in a 10% HCL at 20 °C for 15mins.

No visible color change after immerse in a 10% citric acid at 20 °C for 15mins.

No visible color change after immerse in a 9.1% NaOH at 88 °C for 4 hours.

6000 series (lead free glass color)

Meet FDA or California 65 standard

Suitable for glass table ware, wine bottles, milk bottles.

Firing temperature:580-630°C .

Firing time: 60-90 minutes (keep it 10mins at peak temperature)

Firing temperature:680-730°C

Firing time: 20 minutes (for tempering glass)

Acid and alkali resistance:Good acid and alkali resistance

No visible color change after immerse in a 10% HCL at 20 °C for 15mins.

No visible color change after immerse in a 10% citric acid at 20 °C for 15mins.

No visible color change after immerse in a 9.1% NaOH at 88 °C for 4 hours

Dish washing test: pass 50cycles.

Firing atmosphere: neutral or weakly oxidizing atmosphere

Coefficient of thermal expansion (CTE) :



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85-95 X 10-7/k-1(50-300 C)

TYPE OF PACKING

20-kg Can

SHELF LIFE

Shelf life depends conditions(temperature and humidity)

The shelf life for an unopened ink container if stored ink dark room at a temperature of 20⁰25⁰ C is one year

Under different conditions, particularly higher storage temperatures, the shelf life is reduced.

PRECAUTION

Please refer MSDS before use.

Be sure to do trials before commercial run to confirm that the product fits the purpose

Additional technical information may be obtained from our Technical Department.

All characteristics described in this Technical Data Sheet refer exclusively to the standard products listed under range, provided that they are processed in accordance with the intended use and only when used with the recommended additives. The selection and testing of the ink for specific applications is exclusively your responsibility. Should, however, any liability claims arise, they shall be limited to

the value of the goods delivered by us and utilized by you with respect to any and all damages not caused intentionally or by gross negligence.

Properties

on the storage

Thermal Expansion	85 95 10-7K-1
Solvent based	IR Drying
Chemical Resistance	Weak acid resistance,grade-5
Viscosity	20-30 Pa s
Solid contents	>80(wt%)