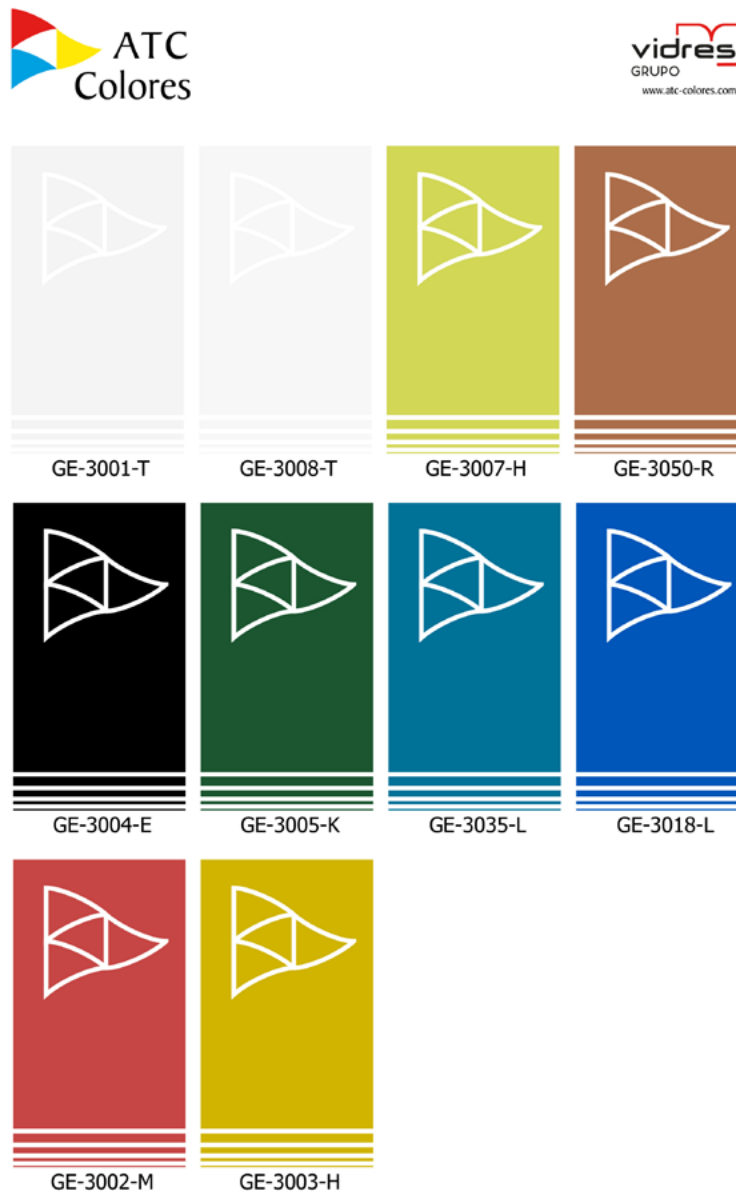


GE SERIES LEADED COLOURS FOR GLASS DECORATION

The Colour Chart shows an approximate impression of the basic colours for a first selection of colours. For exact reproduction of a colour tone it is absolutely necessary to test a sample under original conditions.



Please Note:

The information in this leaflet are based on our current knowledge and experience. This description does not release the users from examinations and tests of their own because of uncountable possible influences, when using and applying the products in connection with every other material being involved in the production. It can not be deduced a legally obliged assurance for specific characteristics or for the aptitude of a definite usage purpose. The receiver of our products has to observe by his own responsibility probable protecting rights as well as existing laws, rules and regulations.

GE SERIES LEADED COLOURS FOR GLASS DECORATION

TECHNICAL DATA SHEET AND USAGE

The GE Series are manufactured to provide a comprehensive range of Leaded Colours for Glass decoration. The colours have been designed for maximum miscibility.

MAIN PROPERTIES

High color intensity

The highest intensity is obtained by printing the colors without flux addition. Gloss and intensity can be fine-tuned by adding a higher or lower amount of fluxes.

Excellent particle size powder distribution

The particle size of the colors will vary depending on the composition, in this series the Typical Diameter particle D50=3-5 microns and D90=15-20 microns with trace residue on a 120 s sieve.

Resistance

It is necessary for users to determine durability according to their own production conditions because these colours have been designed where high chemical resistance is not required, such as for decorative glassware, lighting fixtures, some cosmetic bottle applications, etc.

Low thermal expansion coefficient

The Coefficient of thermal expansion is $75-85 \times 10^{-7} \cdot 1/K$ (20 to 400°C) and it is suitable for different materials.

MISCIBILITY AND COMPATIBILITY

All colours are designed for maximum intermixing. In fact, they can be blended to achieve a variety of tones and hues. The White GE-3001-T and Strong White GE-3008-T can be used to create pleasing pastel shades and GE-3000-C Semi-Transparent Flux is suitable for dilution.

In the case of GE-3002-M Cd Red and GE-3003-H Cd Yellow, these should be in the majority of 95% of the blend.

We recommend carrying out test under industrial conditions.

Please Note:

The information in this leaflet are based on our current knowledge and experience. This description does not release the users from examinations and tests of their own because of uncountable possible influences, when using and applying the products in connection with every other material being involved in the production. It can not be deduced a legally obliged assurance for specific characteristics or for the aptitude of a definite usage purpose. The receiver of our products has to observe by his own responsibility probable protecting rights as well as existing laws, rules and regulations.



GE SERIES LEADED COLOURS FOR GLASS DECORATION

APPLICATION

THERMO PLASTIC DIRECT PRINT

As a guide, recommended mixing ratios and medium below:

Reference	Description	Parts medium per 10 parts of colour	Water Media	Oil-based Media
M279	PAD PRINT MEDIUM	4	✓	
M279W	TP MEDIUM	4	✓	
M85	TP D/S MEDIUM M85	2,5		✓

DIRECT SCREEN PRINTING AND RECALCS

The following polyester screen mesh is recommended for Cold Direct Screen and Decal Printing on a 77T or 90T and the following table below provides some suggested powder to medium ratios for mixing:

Reference	Description	Parts medium per 10 parts of colour	Water Media	Oil-based Media
L427	WATER MISCIBLE MEDIUM	2,5	✓	
W172	WATERBASED PRINT MEDIUM	2,5	✓	
M286D	SEMI-THIXO S/PRINT MEDIUM	5		✓
M286T	THIXOTROPIC S/P MEDIUM	7		✓
M51D	SCREEN TRANSFER MEDIUM	4		✓
M6	DIRECT PRINT MEDIUM	2,5		✓

It is recommended M6 for Cold Direct Screen Printing and M51D, M286T and M286D for Indirect Printing or Decals.

HANDPAINTING-MACHINE BANDING AND LINING & SPRAYING OR AEROGRAPHING

The colors can supplied as dry powder for painting directly onto glazed ware and also in the following mediums:

Reference	Description	Parts medium per 10 parts of colour	Water Media	Oil-based Media
W108	WATERBASED HAND PAINT MEDIUM	5	✓	
W162N	GELLED BANDING MEDIUM	4		✓
M9	HAND PAINTING MEDIUM	2,5		✓

Please Note:

The information in this leaflet are based on our current knowledge and experience. This description does not release the users from examinations and tests of their own because of uncountable possible influences, when using and applying the products in connection with every other material being involved in the production. It can not be deduced a legally obliged assurance for specific characteristics or for the aptitude of a definite usage purpose. The receiver of our products has to observe by his own responsibility probable protecting rights as well as existing laws, rules and regulations.

GE SERIES LEADED COLOURS FOR GLASS DECORATION

FIRING RECOMMENDATIONS

Depending on Glass type and firing cycle the firing should be in the range of 550-640 degrees centigrade in approximately 2.5 hours but it is advisable that customers trial under their own conditions.











Fast firing and shorter cycles are recommended:

580-640 degrees/50-60 min

ACID AND ALKALI RESISTANCE

The chemical resistance of the fired color layers is influenced by the color deposit and the firing conditions. The colors could show a very slight signs of attack with 4%acetic acid solution (22±2°C, 24h) as well as with 5% sodium carbonate solution (60±2°C, 32h). We recommend carrying out tests under industrial conditions.

REFERENCES

Colour	Reference		Colour Composition	Pantone
	GE-3001-T	White	Ti	
	GE-3008-T	Strong White	Ti	
	GE-3002-M	Cd. Red	Cd-S-Se	2033 C
	GE-3003-H	Cd. Yellow	Cd-S-Zn	606 C
	GE-3004-E	Black	Cr-Fe-Co	Black C
	GE-3005-K	Chrome Green	Cr	357 C
	GE-3007-H	Yellow	Pb-Ti-Sb	584 C
	GE-3018-L	Blue	Co-Al	2935 C
	GE-3035-L	Cyan	Co-Cr-Al	633 C
	GE-3050-R	Golden Brown	Cr-Fe-Zn-Al	4263 C
	GE-3000-C	Semi-Transparent Flux	-	
	GE-3006-C	Glass Enamel Etch	-	

Please Note:

The information in this leaflet are based on our current knowledge and experience. This description does not release the users from examinations and tests of their own because of uncountable possible influences, when using and applying the products in connection with every other material being involved in the production. It can not be deduced a legally obliged assurance for specific characteristics or for the aptitude of a definite usage purpose. The receiver of our products has to observe by his own responsibility probable protecting rights as well as existing laws, rules and regulations.