



CHROMATIC EMBRACE

WATER-BASED PAINTS FOR CONTAINER GLASS





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VIDREA: UNLIMITED SOLUTIONS FOR CONTAINER GLASS PAINTING.

The considerable experience gained by ICA Group's Research & Development laboratories in the formulation of water-based paints has led to the creation of a specific range for both flat and container glass painting: **VIDREA GLASS PAINTS**.

The **VIDREA** range of water-based coatings for **container glass** offers high performance and both aesthetic and application advantages. These coatings can be applied **by spray, electrostatic turbodisk** or rotating cup.

This range includes **transparent, colored, lacquered and metallic bicomponent and thermosetting** water-based paints (also without adhesion promoter). An unlimited and flexible color range with ample customization options, which also allows screen printing with the most common standard or UV drying inks.

More than 2,300 colors to choose from **ICA, RAL and NCS** sample books, all of which can be faithfully reproduced thanks to **ICA COLOR** tintometric system, in addition to custom-made **color samples** prepared in a short time.

Water-based paints for container glass are non-flammable, dilutable in water and therefore simple to prepare and use. They have reduced levels of volatile organic compounds and no dangerous carcinogenic or toxic substances, thus complying with the legislation on the limitation of solvent emissions into the atmosphere as well as with the "Proposition 65", an important benchmark for the state of California and the US market itself.

EVERYTHING IS EASIER WITH VIDREA.

Features & benefits.

- Most of the **VIDREA** paints for container glass were designed to have **products that are safe to use**.
- **They allow to meet any production requirement.**
The thermosetting paints meet high productivity demand: thanks to their stability and versatility during application they are used on rapid and automated systems; for complete drying, the temperature must be between 160 and 180° C. On the other hand, bicomponent paints require the use of a catalyst and can therefore be used in all drying conditions.
- The **VIDREA** paints for container glass can be applied with the most common application systems - **by spray, electrostatic turbodisk or rotating cup**.
- It is possible to obtain **unlimited colors and special effects** and to create a wide range of colors independently with **ICA COLOR** tintometric system.
- **Reduced environmental impact.**





HIGHLIGHTS.

THERMOSETTING WATER-BASED PAINTS

Water-based paints for the creation of **transparent or hiding shades** on flat or container glass. They can be colored using the products of the **CNA** and **CG** series and are pigmentable with **PA** series products. The drying temperature may vary between 140°C and 180°C.

WATER-BASED SAFETY PAINT

GPSAFE is a transparent or colored water-based product that can be applied by spraying or curtain-coating and that enables glass and mirrors to be made safe. It forms a thin film that, if the glass or mirror cracks, holds all of the shards in place, thereby preventing dangerous cuts or other accidents. This product, which has been subject to pendulum impact testing as per the EN 12600:2004 standard, is categorized in class 2[B]2. As such, it falls within the safety parameters for single flat panes of glass for use in construction.

SOFT TOUCH WATER-BASED PAINTS

Bicomponent and thermosetting water-based paints for the creation of surfaces with **high softness** and extremely high resistance both to washing tests in dishwashers and to specific tests in the perfumery sector.

BINDERS FOR METALLIC PAINTS

The water-based binders of the **GPI10IST** series, which are specific for the creation of a metallic finish on container glass, allow to obtain a very wide range of effects.

GOLD EFFECT

The **GPGOLD24K** water-based paint represents an important evolution in the creation of a **gold effect**. It allows to obtain extremely shiny surfaces with excellent adhesion on glass. The container glass painting cycles made with **GPGOLD24K**, protected with ICA transparent products, pass the GI solution resistance test and the standard washing cycle in the dishwasher.

Watch the video
GPSAFE:
safety paint



EXCELLENT PERFORMANCE.

The **VIDREA** paints for **container glass** are formulated according to standard tests and clients' specifications for the homeware, perfumery and F&B markets.

CHEMICAL-PHYSICAL TESTS

OVERALL MIGRATION	ITALIAN MINISTERIAL DECREE OF 21 MARCH 1973; COMMISSION REGULATION (EC) NO. 2023/2006
PB SPECIFIC MIGRATION	ITALIAN MINISTERIAL DECREE OF 21 MARCH 1973; COMMISSION REGULATION (EC) NO. 2023/2006
RESISTANCE TO DISHWASHER USE	UNI EN ISO 12875-1:2005
RESISTANCE TO ALKALIS (naoh 3% 90 min. at 70°C)	Internal method
RESISTANCE TO G1 SPRAY TEST	QAC-MC-828 B
RESISTANCE TO G1 IMMERSION (4 hrs*)	QAC-MC-828 B
RESISTANCE TO G1 SPRAY TEST	INS011
RESISTANCE TO G1 IMMERSION (24 hrs + adhesion)	INS013
RESISTANCE TO G1 IMMERSION (4 hrs at 55°C + adhesion)	INS013
RESISTANCE TO H2O IMMERSION (24 hrs + adhesion)	INS015
RESISTANCE TO H2O IMMERSION (4 hrs at 55°C + adhesion)	INS015
ADHESION	INS008
TRANSPORTATION TEST	Internal method
PASTEURIZATION (30 min. at 80°C)	Internal method
TEMPERATURE CHANGES	ASTM C149/2014

**Requirements according to UNI/CT 054/GL 01 draft (flat glass for construction for outdoor use)*





IN-DEPTH.

BICOMPONENT WATER-BASED PAINTS

CODE	FEATURES	SUITABLE FOR CNA STAINS	SUITABLE FOR CG STAINS	SUITABLE FOR PA PASTES	FOOD CONTACT (Italian Ministerial Decree of 21 March 1975; Regulation (EC) no. 2023/2006)	RESISTANCE TO DISHWASHER USE (UNI EN 12875-1:2005)	L'OREAL TEST	NO DANGER LABEL	PROPOSITION 65 (Safe Drinking Water and Toxic Enforcement Act)
GPW3101T99	Transparent glossy, over 2.300 ready-to-use ICA, RAL & NCS formulations	✓	✓	✓	✓	✓	✓	✓	✓
GPW3101B99	White glossy, over 2.300 ready-to-use ICA, RAL & NCS formulations	✓	✓	✓	✓	✓	✓	✓	✓
GPW3101T10	Matt, dishwasher resistant	✓	-	-	-	✓	✓	-	✓
GPSOFTOUCH2K	Matt, full soft-touch effect	-	-	-	-	✓	✓	✓	✓

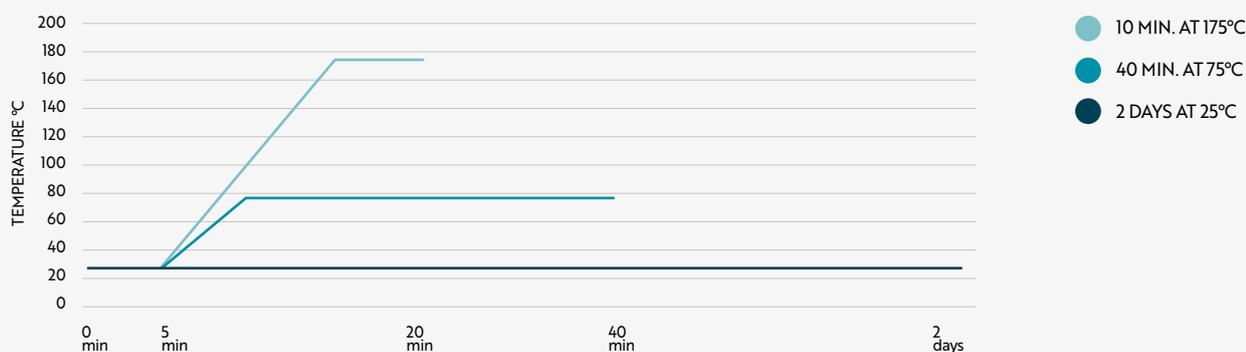
PREPARATION

- Open the can and mix the product to get a uniform mixture.
- Take the amount needed for use
- Weigh the CA517 catalyst and the AD33 or AD106 adhesion promoter (2%) as indicated in the Technical Data Sheet.
- Add the catalyst and the adhesion promoter slowly using a mechanical stirrer.
- Adjust the viscosity with demineralized water (by spray 25-35" DIN4, by turbodisk or rotating cup 15-20" DIN4).

DRYING

The **VIDREA** bicomponent paints for container glass are suitable for all painting systems. They can be dried at room temperature (2 days), at 80°C (40 min) and at 160°C (20 min).

DRYING EXAMPLES FOR BICOMPONENT PAINTS (also applicable for fillers and bases for metallic paints)





THERMOSETTING WATER-BASED PAINTS

CODE	FEATURES	SUITABLE FOR CNA STAINS	SUITABLE FOR CG STAINS	SUITABLE FOR PA PASTES	FOOD CONTACT (Italian Ministerial Decree of 21 March 1973; Regulation (EC) no. 2023/2006)	RESISTANCE TO DISHWASHER USE (UNI EN 12875-1:2005)	L'OREAL TEST	NO DANGER LABEL	PROPOSITION 65 (Safe Drinking Water and Toxic Enforcement Act)
GPW4101T10	Transparent thin etched, over 2,300 ready-to-use ICA, RAL & NCS formulations	✓	-	✓	✓	✓	✓ *	✓	✓
GPW4102T10	Transparent textured etched, over 2,300 ready-to-use ICA, RAL & NCS formulations	✓	-	✓	✓	✓	✓ *	✓	✓
GPW4103T15	Matt, dishwasher resistant	✓	-	-	-	✓	✓	-	✓
GPW4101T99	Transparent glossy	✓	✓	✓	✓	✓	✓	✓	✓
GPW4102T99	Transparent glossy, over 2,300 ready-to-use ICA, RAL & NCS formulations	✓	✓	✓	✓	✓	✓	✓	✓
GPW4102B99	White glossy, over 2,300 ready-to-use ICA, RAL & NCS formulations	✓	✓	✓	✓	✓	✓	✓	✓
GPTHERMOFT	Matt, full soft-touch effect	-	-	-	✓	✓	✓	✓	✓

*Only available in lacquered version.

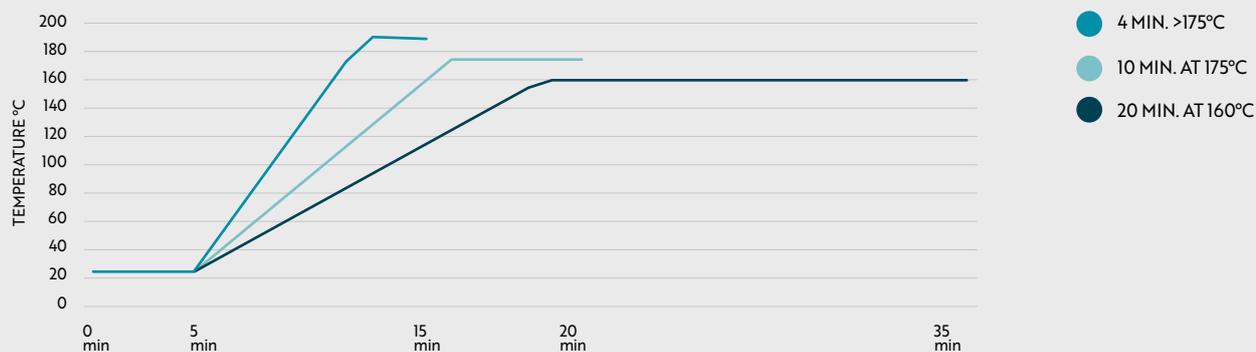
PREPARATION

- Open the can and mix the product to get a uniform mixture.
- Take the amount needed for use.
- Weigh the AD33 or AD106 adhesion promoter (2%) as indicated in the Technical Data Sheet.
- Add the adhesion promoter slowly using a mechanical stirrer.
- Adjust the viscosity with demineralized water according to the type of application (by spray 25-35" DIN4, by turbodisk or rotating cup 15-20" DIN4).

DRYING

The **VIDREA** thermosetting paints for container glass must necessarily reach a temperature of at least 160°C. The standard cycle involves a flash-off time of 2-3 minutes at ambient temperature, and a temperature ramp from 25°C to 160-180°C for 10-20 min.

DRYING EXAMPLES FOR THERMOSETTING PAINTS



READY-TO-USE THERMOSETTING WATER-BASED PAINTS (without adhesion promoter)

CODE	FEATURES	SUITABLE FOR CNA STAINS	SUITABLE FOR CG STAINS	SUITABLE FOR PA PASTES	FOOD CONTACT (Italian Ministerial Decree of 21 March 1973; Regulation (EC) no. 2023/2006)	RESISTANCE TO DISHWASHER USE (UNI EN 12875-1:2005)	L'OREAL TEST	NO DANGER LABEL	PROPOSITION 65 (Safe Drinking Water and Toxic Enforcement Act)
GPW5101T99	Transparent glossy	✓	✓	✓	✓	✓	✓	✓	✓
GPW5101B99	White glossy	✓	✓	✓	✓	✓	✓	✓	✓
GPW5102T99	Transparent glossy	✓	✓	✓	✓	✓	✓	✓	✓
GPW5101T10	Transparent matt	✓	✓	✓	-	✓*	✓	✓	✓

* Only available in lacquered version.

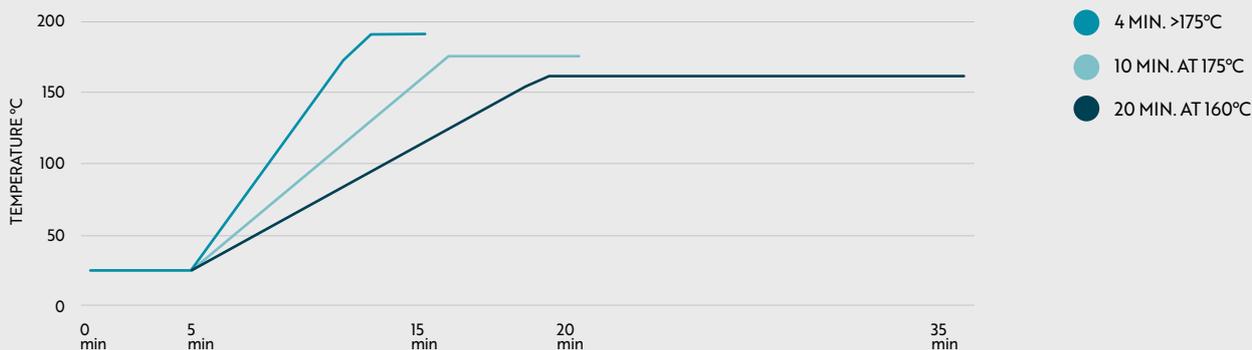
PREPARATION

- Open the can and mix the product to get a uniform mixture.
- Take the amount needed for use.
- Adjust the viscosity with demineralized water according to the type of application (by spray 25-35" DIN4, by turbodisk or rotating cup 15-20" DIN4).

DRYING

The **VIDREA** thermosetting paints for container glass must necessarily reach a temperature of at least 160°C. The standard cycle involves a flash-off time of 2-3 minutes at ambient temperature, and a temperature ramp from 25°C to 160-180°C for 10-20 min.

DRYING EXAMPLES FOR READY-TO-USE THERMOSETTING PAINTS



FILLERS AND BASES FOR METALLIC PAINTS

CODE	FEATURES	SUITABLE FOR CNA STAINS	SUITABLE FOR CG STAINS	SUITABLE FOR PA PASTES	FOOD CONTACT (Italian Ministerial Decree of 21 March 1973; Regulation (EC) no. 2023/2006)	RESISTANCE TO DISHWASHER USE (UNI EN 12875-1:2005)	L'OREAL TEST	NO DANGER LABEL	PROPOSITION 65 (Safe Drinking Water and Toxic Enforcement Act)
GP FILLER	Monocomponent, filling base coat suitable for multi-layer cycles. It can be overcoated after drying	✓	-	✓	✓	✓	✓	✓	✓
GPW1109T	Vehicle for water-based metallic paints	-	-	-	✓	✓	✓	✓	✓

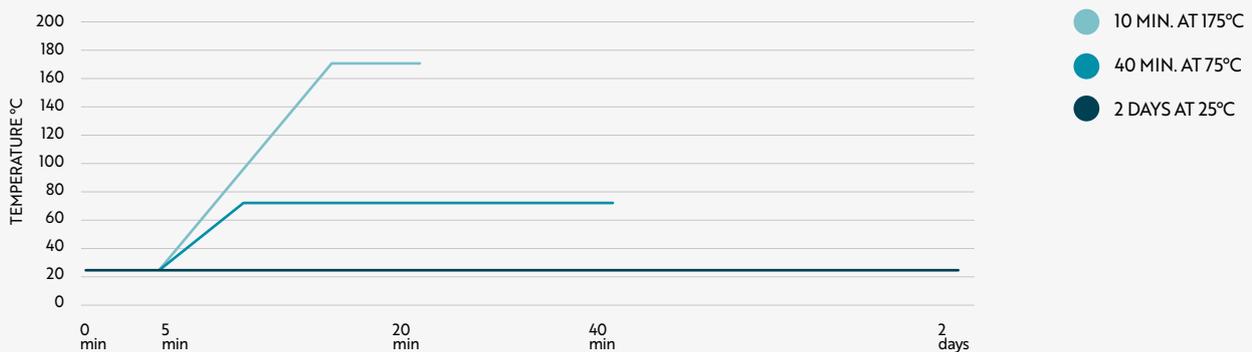
PREPARATION

- Open the can and mix the product to get a uniform mixture.
- Take the amount needed for use.
- Weigh the AD33 or AD106 adhesion promoter (2%) as indicated in the Technical Data Sheet.
- Add the adhesion promoter slowly using a mechanical stirrer.
- Adjust the viscosity with demineralized water according to the type of application (by spray 25-35" DIN4, by turbodisk or rotating cup 15-20" DIN4).

DRYING

The fillers and bases for **VIDREA** metallic paints for container glass are suitable for all painting systems. They can be dried at room temperature (2 days), at 80°C (40 min) and at 160°C (20 min).

DRYING EXAMPLES FOR FILLERS AND BASES FOR METALLIC PAINTS (also applicable for bicomponent paints)







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