



Technical Data Sheet

Green solvent (20DD)

Formula: Mixture

PRODUCT DESCRIPTION:

High performance Non-VOC and Green solvent for water-based decorative paint performs well in all types of latex paints like acrylic, styrene-acrylic, etc., in a variety of weather conditions, and over substrates with different levels of porosity.

This product shows an equivalent dosage used with propylene glycol in function of improve scrub resistance, improve gloss and maintain consistency, improve open time and wet edge, freeze thaw stability and anti-skinning in water-based decorative paint and has no significant interference effect on paint properties including viscosity, pH, color development/film properties like dirt pick up, gloss, hardness, washability, water resistance and mud cracking resistance.

Because of producing from sustainable material, Non-VOC and Green solvent for water-based decorative paint is the environmental friendly solvent that can reduce the carbon footprint and green house gas from the manufacturer process, which safe for paint maker & end-user. Allows the formulation flexibility that is needed to meet increasingly stringent environmental compliance regulations, without compromising performance as following, with a high boiling point more than 250°C of Green solvent (20DD), These product is not classified as a VOC according to European Union Decopaint Directive 2004/42/EC (commonly referred to as the Decopaint Directive); European Union Solvent Emissions Directive and China State Environmental Protection Agency.

APPLICATIONS:

- Non-VOC and Green solvent for water-based decorative paint

Key Attributes:

- NonVOC*
- Green, made from renewable plant-based materials
- Improve scrub resistance
- Improve Gloss and maintain consistency
- Improve Open time and wet edge
- Increase work ability and maintain in-can storage
- Low Odor
- Non-HAP, Non-SARA
- Maintains other paint performance

*VOC content of Green solvent < 1 g/l, as determined by an outside lab using the ISO 11890-2



TYPICAL PROPERTIES:

Properties	PG	Green solvent (20DD)
Assay	≥99.5%	≥65%
Boiling point (°C) - ASTM D1078-11	187	>270 Excluding water
Freezing Point	<-65°C	< 9
Pour point (°C) - ASTM D 97-17a	<-57	< 12
Specific Gravity @25°C	1.03	1.10
Viscosity @25°C (mPas)	48.6	120
Surface tension @25°C (mN/m)	36.6	29.97

APPLICATION PERFORMANCE

EXCELLENT OPEN TIME/WET EDGE EXTENDER

Non-VOC and Green solvent are the improvement solvent for open time/wet edge extender of gloss water-based decorative paint in an equivalent dosage used with propylene glycol (Fig.2 and Fig.3).

Longer open time can reduce overlapping coating defects when dealing with large painting jobs. In addition, its property feels smooth during painting.

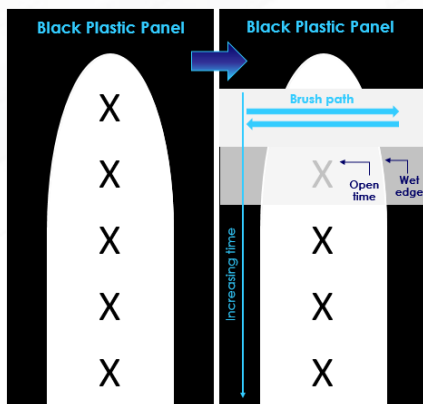


Fig 1. Method for evaluation of open time/wet edge (ASTM D7488)

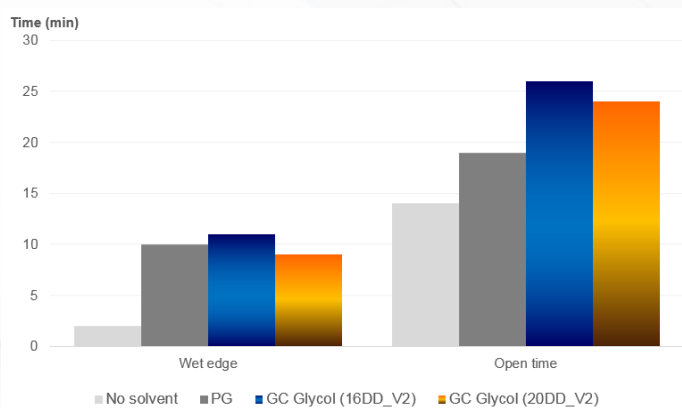


Fig 2. The open time/wet edge extender in decorative paint with 3.0 – 4.0 % Solvent



HANDLING AND STORAGE:

Keep the material in the anhydrous state to prevent severe corrosion to the carbon steel or aluminum tank and related equipment. For longer term color stability, it is recommended that the product be stored under an inert atmosphere.

For storage conditions, product is hygroscopic, water contamination should be avoided. Keep container tightly closed without air contamination. The periods of exposure to high temperatures should be minimized. Avoid direct contact to sunlight and higher temperature. Storage under inert atmosphere such as nitrogen is recommended.

TERMS & CONDITIONS:

Copyright © 2022 PTT Global Chemical Public Company Limited. All rights reserved.

All information contained in the document is reliable to the best knowledge of PTT Global Chemical Public Company Limited. The information is intended to describe the product for the purpose of health, safety and environmental requirements only. All users should conduct an adequate study to firm the suitability of any product in regard to such use. In addition, each user should obtain detailed information on toxicity, handling and storage, proper shipping, together with all appropriate health, safety and environmental standards. No representations or warranties, either express or implied, of merchantability, fitness for a particular purpose or of any other nature are made hereunder with respect to information or the product to which that information refers. In no event will PTT Global Chemical Public Company Limited be hereby responsible for loss, damage or expense of any nature whatsoever resulting from the use of or reliance upon the information herein or the product to which that information refers.



PTT Global Chemical Public Company Limited

Head Office : 555/1, Energy Complex, Building A, 14th-18th floor, Vibhavadi Rangsit Road, Chatuchak, Bangkok 10900 Thailand

Tel. : +66 (0) 2265-8400 Fax : +66 (0) 2265-8500

Rayong Plant : 9-9/1 Soi G12, WHA Eastern Industrial Estate (Map Ta Phut), Pakorn Songkhraorat Road, Map Ta Phut, Mueang Rayong, Rayong 21150, Thailand

Tel. : +66 (0) 3899-4000 Fax : +66 (0) 3892-5988

For Enquiry, please contact at EOEG@pttgcgroup.com
Website : <https://www.pttgcgroup.com/>