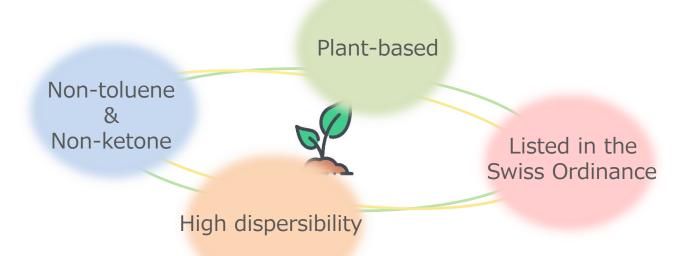
Environmentally friendly solvent-based dispersant

# **HOMOGENOL L-28E**

#### "HOMOGENOL L-28E" is a toluene and ketone free, environmentally friendly dispersant.



## Main applications and Features

#### Gravure inks

- ·Antistatic effect during printing
- High dispersibility
- •Reduce excess ink to a plate cylinder

#### <u>paints</u>

- •Improvement of coating film gloss
- High dispersibility
- Prevent color separation
- $\ensuremath{\mathbbmu}$  It can also be used as a dispersant in oil for other products.

## ☑ Properties of HOMOGENOL L-28E

	-	
composition	Special polymer type surfactant	
raw materials	Palm oil / Coconut oil	
appearance	Liquid	
Actual Matter	30%	
Diluted solvent	ethyl acetate / isopropyl alcohol	

## ☑ Features of HOMOGENOL L-28E

#### I. Dispersibility

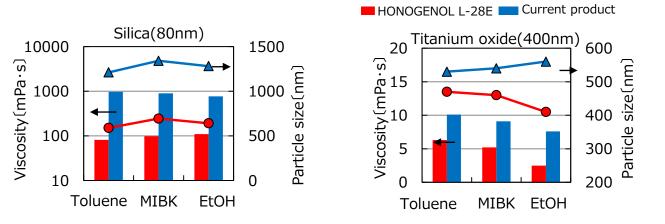


Fig 1. Particle size and viscosity of the dispersion dispersed with HOMOGENOL L-28E

※ Measurement conditions: Slurry concentration 10%, 5% dispersant added to the dispersion Add 1 mm diameter zirconia beads and treat with a paint shaker for 3 hours.

## "Homogenol L-28E" can achieve both high dispersibility and low viscosity for each dispersion.

### II. Redispersibility and long term stability

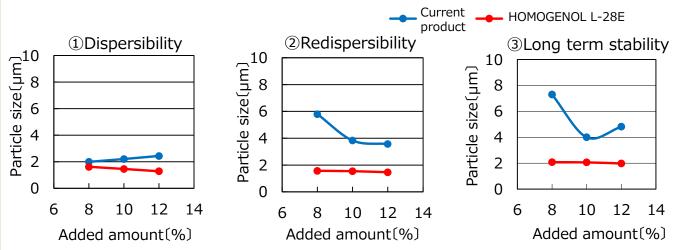


Fig 2. Particle size of carbon black dispersed with HOMOGENOL L-28E

%Measured conditions

1 Dispersed for 3h with ultrasonic waves.

②After drying, it was diluted again with a dispersion medium.

3 was stored under 50  $\mbox{\sc condition}$  for 7 days.

#### "Homogenol L-28E" has **excellent redispersibility** and **dispersion stability**, so stable printing can be achieved.

## Appeal point as a dispersant for gravure ink

I. Solvent	/ dispersion	correspondence table

dispersion Solvent	TiO <sub>2</sub>	SiO <sub>2</sub>	Carbon black	Red	Blue	yellow	Magenta
Xylene	×	×	×	Ø	$\bigtriangleup$	Ø	×
Ethyl acetate/IPA	0	Ø	Ø	$\bigcirc$	×	0	×
MIBK	0	0	0	O	×	Ø	Ø
Acetone	0	Ø	O	0	0	×	Ø
Butanol	0	Ø	O	$\bigtriangleup$	×	×	$\bigtriangleup$
Ethanol	0	Ø	O	O	O	×	×
Methanol	0	0	0	O	O	×	×

Table 1. Dispersibility of Homogenol L-28E %\*Dispersion stability:  $\odot$  Very good,  $\bigcirc$ Good,  $\times$  Bad

"HOMOGENOL L-28E" shows **excellent dispersion stability** for various dispersion media and dispersoids.

#### I. Reduction of stains on the printing plate

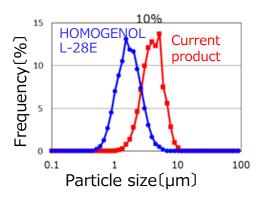


Fig3. Slurry redispersibility % Slurry is "pigment + dispersant"

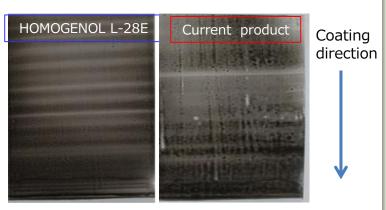


Fig 4. Ink coating after drying

% This ink is "pigment + urethane resin + dispersant"

By using "Homogenol L-28E", peculiar streaks in gravure printing do not occur, so **stable printing is possible**.

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