

SolutionPartner

Poly Vinyl Chloride / LG PVC Resin

PVC



 **LG Chem**

Suspension & Specialty Grade Resins

Property	Degree of Polymerization	K-Value	Particle Size	Apparent Bulk Density	Volatiles
Unit	ASTM D1243		retained on 45 Mesh %	g/cm ³	%
Test Method			ASTM 1921	ASTM 1895	ASTM D3030

*Suspension Resins

LS070	700±30	58	Max 0.07	0.61±0.03	Max 0.2
LS080S	800±30	61	Max 0.2	0.595±0.02	Max 0.3
LS100	1000±50	66(65)	Max 0.2	0.58±0.03	Max 0.3
LS100S	1030±30	66	Max 0.05	0.54±0.02	Max 0.2
LS100H	1030±30	66	Max 0.5	0.595±0.025	Max 0.2
LS100E	1290±30	67	Max 0.1 (35 Mesh)	0.57±0.03	Max 0.2
LS130S	1650±50	70	Max 0.2	0.52±0.02	Max 0.3
LS170	2650±100	76	Max 0.05	0.05±0.02	Max 0.2
LS300	2650±100	84	Max 0.05	0.49±0.02	Max 0.2

*Specialty Grade Resins(Blend Resins)

LB110	1000±50	66	Max 0.3 (100 Mesh)	0.59±0.05	Max 0.3
LB100M	-	-	Max 0.3 (100 Mesh)	0.55±0.05	Max 0.3

Paste Resins

Property	Degree of Polymerization	K-Value	Apparent Bulk Density	Volatiles	Brookfield Viscosity	
Unit	ASTM D1243		g/cm ³	%	DOP(phr)	cps(6rpm)
Test Method			ASTM D1895	ASTM D3030	ASTM 1824	
LP090	950±50	65	0.35±0.02	Max 1.2	60	4500±1500
LP170	1550±50	75	0.34±0.02	Max 1.2	60	5500±1500
LP170G	1570±50	75	0.34±0.03	Max 1.2	60	4000±1000
LP010F	1650±50	76	0.34±0.04	Max 1.2	60	4500±1500
PB900	900±50	64	0.35±0.05	Max 0.7	60	4500±3000
PB1120	1000±50	66	0.36±0.02	Max 0.5	60	30000±15000
PB1200	1150±50	68	0.37±0.03	Max 0.3	60	11000±6000
PB1202	1050±50	67	0.36±0.02	Max 0.2	40	25000±15000
PB1302	1250±50	70	0.36±0.03	Max 0.2	40	20000±10000
PB1752	1700±50	76	0.35±0.02	Max 0.2	40	20000±10000
PE1311	1250±50	70	0.36±0.02	Max 0.2	90	55000±25000



LGflex[®] **GL300**

**LGflex GL300 will be the best Solution for you
in terms of green marketing and quality innovation.**

LGflex GL300 is a Non-Phthalate plasticizer free from six types Phthalates of European Environmental Regulation.

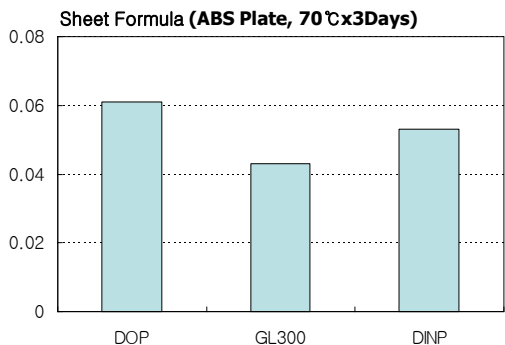
Physical Properties

Parameter	Unit	Typical Value	Parameter	Unit	Typical Value
Viscosity(20℃)	cp	82	Specific Gravity(20℃)	-	0.984
Boiling Point(760mmHg)	℃	400	Solubility in Water @ 20℃	g/l	0.004
Freezing Point	℃	-48	Phthalate Content	ppm	0
Flash Point	℃	238	Heavy Metal Content	ppm	0

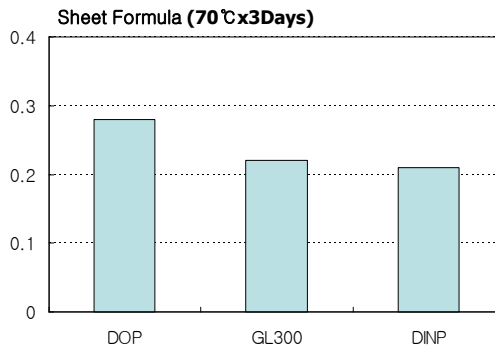
- ☞ Phthalate (Detection Limit:50ppm) / Content of Heavy metal guaranteed by certification authority
- ☞ Hazardous, Suspicious Substance (Restricted from June, 2007)
 - DOP, DBP, BBP: Designated as hazardous Substance
 - DINP, DIDP, DNOP: Designated as Suspicious Substance
- ☞ European Environmental Regulation (From Jan. 2007): DOP, DBP, BBP, DINP, DIDP, DNOP

Application Properties

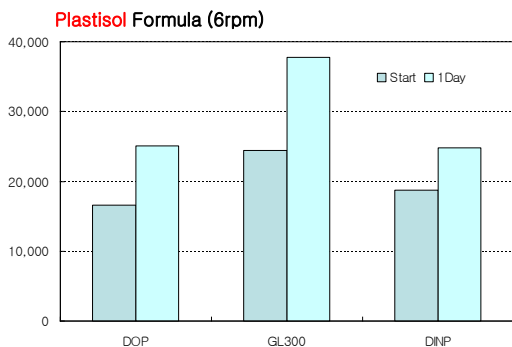
Migration



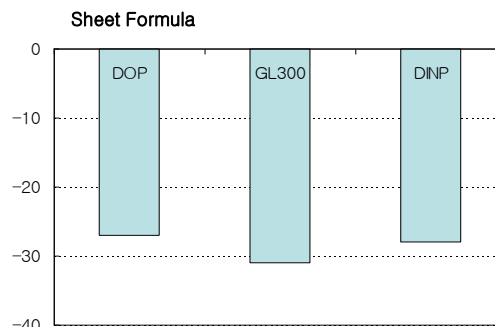
Heat Loss



Viscosity Property



Low Temperature Resistance



Note) Unit : Migration(wt%), Viscosity(cp), Heat Loss(wt%), Low Temperature Resistance(℃)
Plasticizer : 55phr

Merits by application



Sheet

- Suitable for sheet and inflatable film
 - * Free from suspicious endocrine-disrupting article
- Favorable for automobile interior material thanks to odorlessness
- Good Heat Resistance, good for following material
 - Hard Type(Deco sheet),
 - Semi-flexible Type(Transparent/High glossy sheet), Film



Flooring

- Advantageous in acquiring Environmental Certificate/HB Mark(TVOC, HCHO)
 - * Law of "Air Quality Control in multi-use facilities" takes effect by MOE(Ministry of Environment).
- Free from hazardous article designated by MOE(Ministry of Environment).
- None detect for endocrine-disrupting chemicals and heavy metal



Artificial Leather

- None detect of endocrine-disrupting chemicals and heavy metal
- Contribute to enhancing productivity
 - Good foaming magnification
 - Minimizing low boiling material
- Improving working environment(Low Gas, low odorlessness)




Wire & Cable Compound

- Favorable for electricity and electronics application
 - * Neither Korean hazardous article nor six types of European Environmental Regulations includes GL300.
- Free from hazardous article designated by MOE
- Good for less smell needed application
- Good heat resistance(Volatility Resistance)



LGflex[®] **GL500**

**“ GL500 will provide
a fresh and better
solution for your future.”**



Introduction



LGflex GL500

- **GL500 exhibits the best performance to allow for the physical property combined with good processability.**
- **GL500, as a non-phthalic plasticizer, can be substitute for current phthalic plasticizer which has a harmfulness for human reproduction.**
- **GL500 offers great efficiency comparing other plasticizers and is recommended in application like wallcovering and compounds.**
- **GL500 is being applied in a broad variety of end-users, such as flooring, wallcovering, flooring and compounds specially it can be incorporated in plastisol.**

Product Specification



LGflex GL500

Molecular Weight	365
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Physical and chemical properties

Color (APHA)	25 max.
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Acid Value	0.02 max.
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Viscosity (25 °C)	45 cP
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Specific Gravity (20 °C)	0.995 ± 0.003
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Freezing Point	-45 °C
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Flash Point	210 °C
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Solubility in Water @ 20 °C	0.002 g/L
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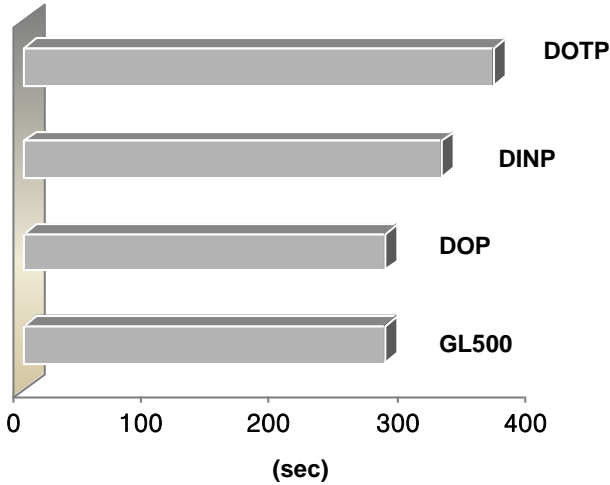
Phthalate Content	N.D
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Heavy Metal Content	N.D
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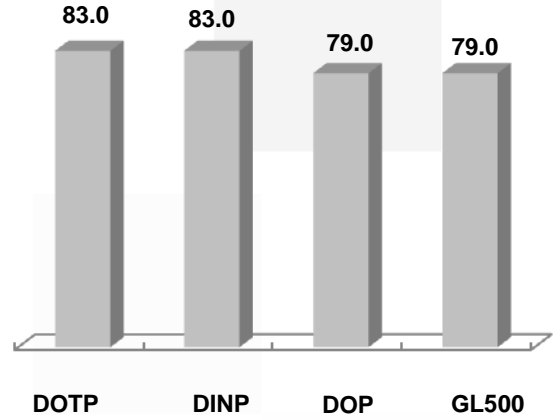
Application Characteristics

Suspension Resin

Plasticizer absorption time

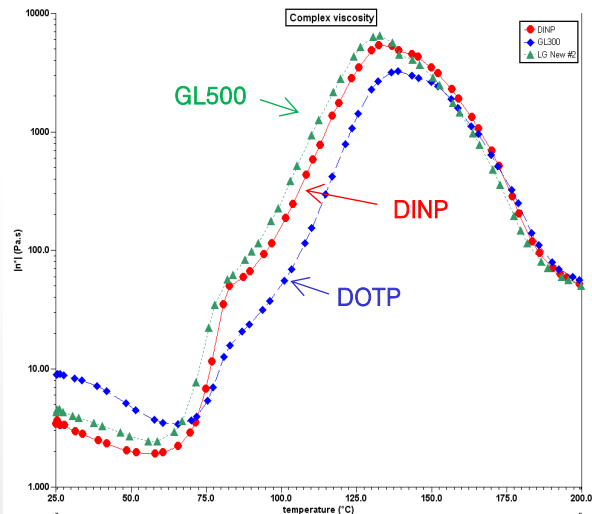


Hardness (shore "A")

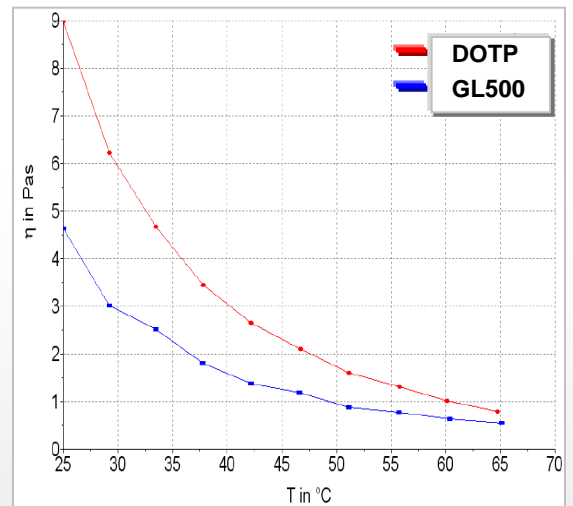


Emulsion Resin

Gelling Temperature



Plastisol Viscosity



Contact Information



LGflex GL500 Gives Customers Better Life.

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