

# Typical Properties

## PAPHEN® Phenoxy Resins (Solid Grades)

Property	PKHC®	PKHH®	PKHJ®	PKFE®
Form	Pellets	Pellets	Pellets	Pellets
Appearance	Translucent	Translucent	Translucent	Translucent
Tg, °C	95	95	95	95
Molecular Weight, Mn <sup>(5)</sup>	10-16,000	10-16,000	10-16,000	10-16,000
Nonvolatiles, % by wt, min	99 <sup>(3)</sup>	99 <sup>(3)</sup>	99 <sup>(3)</sup>	99 <sup>(4)</sup>
Specific Gravity	1.17-1.19	1.17-1.19	1.17-1.19	1.17-1.19
Viscosity <sup>(1)</sup> at 25°C, cP	410-525	525-715	600-775	535-895
Theoretical OH Equiv Wt	284	284	284	284
Color, APHA, max	200	200	200	200
Solution Haze, %, max	15	15	15	15
Melt Index <sup>(2)</sup> , g/10 mm	-	-	-	2.0-3.0

(1) Determined on 20% solution in cyclohexanone

(4) 2 hrs. @ 135°C + 1 hr. @ 220°C

(2) 220°C at 44 psi

(5) Mw=40-60,000

(3) 2 hrs. @ 135°C

## PAPHEN® Phenoxy Solutions

	PKHS®-30PMA	PKHS®-40
Appearance	Clear, viscous liquid	Clear, straw-yellow liquid
Molecular Weight, Mn	10-16,000	10-16,000
Total Solids, % by wt	30	40
Viscosity at 25°C, cP	5000-15,000	4500-7000
Boiling Point at 760 mm Hg, °C (°F)	146 (295)	80 (176)
Freezing Point, °C (°F)	-55 (-67)	-37 (-35)
Flash Point, Tag Closed Cup, °C (°F)	46 (115)	-6 (21)
Water Content, % by wt, max	1	1
Color, Gardner, max	1	1
Solution Haze, %	30	15

## PAPHEN® Phenoxy Waterborne Dispersions

	PKHW®-34	PKHW®-35
Solids, % by wt	34	30
Water, % by wt	54	57
Cosolvent/Neutralant, % by wt	14	13
Cosolvent	Butanol (2-4%), PnP <sup>(2)</sup> (5-7%)	Butoxyethanol (8-10%)
Neutralant	DMEA (1-3%)	DMEA (2-3%)
Weight per Gallon, lb	8.8	9.0
Viscosity <sup>(1)</sup> , Brookfield, cP	800-1600	1500-4000
pH	7	7
Color	Cream	Cream
Shelf Life	25°C >6 months	25°C >6 months
Freeze-Thaw	Stable (>10 cycles)	Stable (>10 cycles)
Particle Size (median), microns	0.1	1.5

(1) No. 4 spindle, 50 rpm, 25°C

(2) Propylene glycol n-propyl ether

## PAPHEN® Phenoxy Resin Blends

	PKHM®-30	PKHM®-301	PKHM®-85
Form	Pellets	Pellets	Liquid
Appearance	Opaque	Opaque	Slightly hazy
Tg, °C	35	45	-
Nonvolatiles, % by wt	99	99	99
Specific Gravity @25°C	1.15	1.17	1.08
Theoretical OH Equiv wt	648	499	220
Color, APHA max	200	200	200
Solution Haze, % max	15	15	15