

# ESSENTIAL R2358

## METAL-FREE FLOOR FINISH POLYMER

R2358 is a metal-free self cross-linking high solids polymer that can be formulated into floor finishes that compete with most zinc cross-linked finishes. The unique chemistry allows formulators to create a low odor finish which exhibits excellent gloss along with black heel mark and detergent resistance properties. The formulated finishes can meet or exceed Green Seal GS-40 Standards.

### KEY BENEFITS

- High gloss
- Excellent durability
- Low odor
- Quick curing/drying
- Ease of removal

**DISCLAIMER:** The information and recommendations contained herein are based on data believed to be correct. The information is offered solely for the customer's consideration, investigation and verification because of numerous factors beyond our control affecting the results of the use of products, Essential Industries, INC. makes no warranty of any kind, expressed or implied, including those of merchantability and fitness for a particular purpose, other than that the product conforms to its applicable current standard specification. The manufacturer's only obligation shall be to replace such quantity of the product proven to be defective.

### TYPICAL PROPERTIES\*

Appearance .....	Translucent White
pH.....	7.5
Solids, % by Weight .....	39.5
Viscosity, cps @ 25°C .....	< 50
Density, lbs/gal .....	8.75
% VOC .....	0
Tg °C .....	64
Acid Number .....	57
Freeze/Thaw Stability ....	Passes 3 cycles
Konig Hardness (secs).....	78

\*These values should not be interpreted as specifications.



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## Starting Point Formulation – ALV253

<u>Materials</u>	<u>Pounds</u>
Essential R2358	356.9 lbs.
Water	270.8 lbs.
23% solids solution of Joncryl 678 (ASR)	40.7 lbs.
<i>Premix the following water and solvents, then add slowly.</i>	
Water	203 lbs.
Dipropylene Glycol Monomethyl Ether	9.26 lbs.
Diethylene Glycol Monoethyl Ether	36.38 lbs.
Tributoxy Ethyl Phosphate	26 lbs.
Benzoflex LC-531	9.1 lbs.
Benzoflex 181	1.9 lbs.
43G40 Wax	19.6 lbs.
25% Wax Emulsion AC-540	25.5 lbs.
Polyfox PF-2002	0.8 lbs.
Proxel GXL	0.089 lbs.
<b>TOTAL:</b>	<b>1000.00 Lbs.</b>

## Formulation Attributes

Solids, % by weight .....	20%
pH.....	7.5
VOC % .....	< 1%
Wt/gal .....	8.6 lbs./gal.
Polymer/ASR/Wax .....	86/5/9

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### Formulation Performance Information

All formulations tested at 20% solids and < 1% VOCs.

Gloss Results on black BVCT at 1000 sq feet per gallon coverage:

	<u>Degree Gloss</u>	<u>R2358 Starting Point</u>	<u>Commercially Available Green Floor Finish</u>
<b>1st Coat</b>	60	26	28
	20	9	7
<b>2nd Coat</b>	60	58	47
	20	25	17
<b>3rd Coat</b>	60	75	62
	20	44	29
<b>4th Coat</b>	60	83	71
	20	56	38

	<u>R2358 Starting Point</u>	<u>Commercially Available Green Floor Finish</u>
<b>Recoat:</b>	Excellent	Excellent
<b>Black Heel Mark Resistance:</b>	Excellent	Excellent

**Konig Hardness (1-mil dry):**

1 Day	64
7 Days	78

### Supplier Information

<u>Product</u>	<u>Description</u>	<u>Supplier</u>
Joncryl 678	Alkali Soluble Resin	BASF
Benzoflex LC-531	Plasticizer	Eastman
Benzoflex 181	Plasticizer	Eastman
43G40 Wax	Wax Emulsion	Chemcor
AC-540	Wax	Honeywell
Polyfox PF-2002	Leveling Aid	Omnova
Proxel GXL	Preservative	Arch 4K Biocides