

Innovation. In our raw materials. In our solutions.

COST / PERFORMANCE

ENVIRONMENT / HEALTH & SAFETY

PERFORMANCE

PERFORMANCE TESTING

Table 1: Coupling or Emulsification Comparison with d-Limonene.

Ingredient	prototypes:	#1	#2	#3	#4	
Water(di)	%w/w:	86	86	86	86	
Kalex50		4	4	4	4	
Sodium Citrate		4	4	4	4	
AS		1	1	1	1	
R49		5	x	x	x	
Alcohol Ethoxylate 91-6		x	5	x	x	
Alcohol Ethoxylate Blend		x	x	5	x	
Alkasurf NP-9		×	x	x	5	
Cloud Points:		47°C	44°C	35°C	48°C	
Refract:(before addition of d- limonene)		10.8	11.4	11.1	12.4	
d-Limonene until cloudy:		2.2g	0.8g	0.3g	1.5g	

R49 offers enhanced emulsification properties of solvents like d-limonene versus some alcohol ethoxylates or nonyl phenol ethoxylates.

USES & APPLICATIONS

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PRODUCT SPECIFICATIONS

PACKAGE & HANDLING

REGULATORY / TOX INFORMATION