

## Summary Grid of FMC Ingredients Used in Beverage Systems

Application	Products	Recommended Use Level (%)	Bulletin	Ingredient Attributes	Finished Product Benefits/Attributes
<ul style="list-style-type: none"> <li>UHT/Pasteurised Fortified Milk/Chocolate Milk</li> </ul>	SeaKem® CM 611	0.006 – 0.030	BVR-38	<ul style="list-style-type: none"> <li>Suspension with minimal added viscosity plus calcium fortification</li> <li>Basic product for high shear systems</li> <li>Low shear dispersible carrageenan for excellent stability</li> </ul>	<ul style="list-style-type: none"> <li>Thickener</li> <li>Stabilizer</li> <li>Fat replacer</li> <li>Heat stability – HTST, UHT, Retort</li> <li>Suspension</li> <li>Fortification</li> </ul>
	Avicel-plus® CF 1410	0.400 – 0.600	BVR-39		
	Avicel-plus GP 1610	0.250 – 0.400	BVR-40		
	Avicel-plus GP 1615	0.150 – 0.350	BVR-42		
<ul style="list-style-type: none"> <li>Retorted Fortified Milk Chocolate Milk</li> </ul>	Avicel-plus GP 1610	0.250 – 0.350	BVR-41	<ul style="list-style-type: none"> <li>Disperses with low shear</li> <li>Excellent body and mouthfeel</li> </ul>	
<ul style="list-style-type: none"> <li>Soy Milks/Fortified Soy Milks</li> </ul>	Viscarin® SD 389	0.015 – 0.020	BVR-27	<ul style="list-style-type: none"> <li>Calcium fortification</li> <li>Low viscosity, low shear</li> <li>Provides suspension</li> <li>Enhances body and mouthfeel</li> </ul>	
	Viscarin GP 209F	0.015 – 0.020			
	Avicel-plus CF 1410	0.400 – 0.600	BVR-28		
	Novagel® GP 2180	0.250 – 0.350	BVR-29 BVR-31		
<ul style="list-style-type: none"> <li>Dry Mix Systems (Chocolate Milk)</li> </ul>	Lactarin® MV 306 Lactarin XP 3461	RTD basis 0.004 – 0.100 0.004 – 0.100	BVR-32	<ul style="list-style-type: none"> <li>Rapid hydration with spoon stirring</li> <li>Provides excellent body/mouthfeel and flavor release</li> <li>Little viscosity build-up over time</li> </ul>	<ul style="list-style-type: none"> <li>Applications requiring rapid hydration and quick thickening in cold water or milk</li> <li>In dry mixes where suspension of insoluble ingredients is required after reconstitution with cold water or milk</li> </ul>
<ul style="list-style-type: none"> <li>Acidified Soy-Juice</li> </ul>	Protanal® Ester BV 4830	0.200 – 0.500	BVR-1	<ul style="list-style-type: none"> <li>Stabilization of proteins under acidic conditions</li> </ul>	<ul style="list-style-type: none"> <li>Prevents phase separation</li> <li>Maintains stability at lower viscosity, low pH</li> </ul>
<ul style="list-style-type: none"> <li>Coffee Beverages</li> <li>Fortified Coffee Beverage</li> <li>Mocha Beverage</li> </ul>	Avicel-plus CF 1410	0.400 – 0.600	BVR-30	<ul style="list-style-type: none"> <li>Provides emulsion stability</li> <li>Provides increased calcium intake</li> <li>Stabilizes protein</li> <li>Good viscosity and mouthfeel</li> </ul>	<ul style="list-style-type: none"> <li>Provides whiteness/opacity</li> <li>Provides uniform suspension</li> <li>Provides clean flavor release</li> <li>Fats/solids replacer</li> </ul>
	Novagel GP 2180	0.250 – 0.350	BVR-34		
	Gelcarin® GP 379 (op)	0.010 – 0.030			
	Avicel-plus® GP 1610	0.200 – 0.300	BVR-37		
<ul style="list-style-type: none"> <li>Evaporated Filled Milk (Retort, canned)</li> </ul>	Lactarin GP 1221	0.010 – 0.025	BVR-35	<ul style="list-style-type: none"> <li>Cost effective stabilization</li> <li>Provides emulsion stability</li> <li>Imparts smooth, rich mouthfeel</li> </ul>	<ul style="list-style-type: none"> <li>Provides whiteness/opacity</li> <li>Provides uniform suspension</li> <li>Fats/solids replacer</li> </ul>

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