



## Universal Texturizing Systems

### Textureze™ UB Systems

Hydrocolloids are widely used to control the texture, mouthfeel and viscosity of a wide variety of food products. The interactions of these gums and their intended function in the end product have a profound influence on the gum selection. The synergistic interaction between xanthan gum and galactomannans (guar, locust bean gum, and tara gum) can be manipulated to create a broad range of potent texturizers.

The degree of synergy is a function of the galactomannans type, the ratio of xanthan to galactomannans and the conditions of use. Guar-containing formulations at low pH will lose viscosity over time because of acid hydrolysis, and formulations containing locust bean gum (LBG) are used in hot processes since LBG requires heat for complete hydration.

Extensive trials led to the development of ISP's Textureze UB products. These products are optimized xanthan-galactomannan systems developed for a variety of applications. The Textureze UB functional systems provide a range of textures, mouthfeel and viscosities to a wide range of food products.

### The Textureze UB Product Line and Applications

Product	Application	Usage	Benefit
<b>Textureze UB 100 and 130</b>	<p>Synergistic system of xanthan gum and either locust bean gum (UB 100) or guar gum (UB 130).</p> <p>Primarily used in hot processed dairy products like sour cream and cottage cheese.</p>	0.05-0.2%	<ul style="list-style-type: none"> <li>• Highly effective thickeners and stabilizers</li> <li>• Syneresis control</li> <li>• Cost effective</li> <li>• UB 100 produces a soft gel at low concentrations and can be used in various fruit systems</li> <li>• UB 130 provides a smooth consistency with less gel structure than UB 100</li> </ul>
<b>Textureze UB 110 and 120</b>	<p>Synergistic system of xanthan and guar gums for cold processed dressings, sauces, gravies and soups.</p>	0.2-0.5%	<ul style="list-style-type: none"> <li>• Highly effective thickeners and stabilizers</li> <li>• UB 120 is more acid tolerant than UB 110 for texturizing fruit systems and acid dressings and sauces</li> <li>• UB 110 provides a smooth flow while adding viscosity and mouthfeel</li> </ul>

## Sample Recipes

### Cottage cheese dressing using Textureze UB 130

The use of Textureze UB 130 in this recipe results in a smooth creamy dressing that clings well to the cheese curds

	<u>Quantity</u>	
	<u>Grams</u>	<u>%</u>
Liquid skimmed milk	3185	63.7
Whipping cream (38% fat)	1500	30.0
Skimmed milk powder	250	5.0
Salt	60	1.2
Textureze UB 130	5	0.1
<b>Total</b>	<b>5000</b>	<b>100.0</b>



#### Procedure

1. Combine the cream and milk
2. Pre-blend the milk powder and Textureze UB 130 and mix well until smooth and lump free
3. Add the salt
4. Homogenise at approximately 150 bar (2250 psi)
5. Pasteurize and cool
6. Blend with cottage cheese curds (Suggested ratio of 60:40 curds to dressing)

### Tomato Sauce using Textureze UB 110 and 120

For a thick tomato sauce, with a smooth pouring texture, use Textureze UB110 in Example A. For a slightly thicker sauce, with a more spoonable texture, use Textureze UB120 in Example B.

	<u>Example A</u>		<u>Example B</u>	
	<u>Grams</u>	<u>%</u>	<u>Grams</u>	<u>%</u>
Water	2000.0	49.05	2000.0	49.05
Tomato Puree (x2 concentrate)	1000.0	24.53	1000.0	24.53
Spirit Vinegar 12%	300.0	7.36	300.0	7.36
Sugar	600.0	14.72	600.0	14.72
Cook up Starch	40.0	0.98	40.0	0.98
Salt	40.0	0.98	40.0	0.98
<b>Textureze UB 110</b>	<b>12.0</b>	<b>0.29</b>	---	
<b>Textureze UB 120</b>	---		<b>12.0</b>	<b>0.29</b>
Potassium sorbate	4.0	0.1	4.0	0.1
Course Black Pepper	0.8	0.02	0.8	0.02
Worcestershire Sauce	80.0	1.96	80.0	1.96
Ground Nutmeg	0.4	0.01	0.4	0.01
<b>Total</b>	<b>4000.0</b>	<b>100.00</b>	<b>4000.0</b>	<b>100.00</b>



#### Procedure

1. Blend together the Textureze, potassium sorbate, starch, Salt, Pepper, Nutmeg and sugar.
2. Add the dry blend to the water using a high speed mixer and mix until smooth and lump free. (To avoid excess aeration, reduce speed of mixer once gum is dispersed.)
3. Add the tomato puree, Worcestershire sauce and vinegar, and mix well.
4. Heat to 90 °C to cook the starch and hold for 5 minutes to pasteurise the sauce.
5. Deposit hot into desired containers.



# FMC BioPolymer

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- For technical inquiries on FMC products, please call 800-526-3649.
- For technical inquiries on ISP products, please call 888-472-5446.

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