

functionality that improves the texture and stability of many food products. Carrageenan and alginates, both processed from seaweed, are used in a wide variety of food, pharmaceutical and oral care applications. Additionally, we are developing technology platforms within biomedical

markets to provide ultrapure biopolymers and application know-how for biomedical devices. The following chart summarizes the markets for BioPolymer's products and our chemistries in each market:

		Microcrystalline cellulose	Carrageenan	Alginates	Other
Food	Beverage	X	X	X	
	Dairy	X	X	X	
	Convenience foods	X	X	X	X
	Meat and poultry		X	X	
	Pet food and other	X	X	X	
Pharmaceutical	Tablet binding and coating	X	X	X	X
	Anti-reflux			X	
	Liquid suspension	X	X		
	Oral care		X		
	Cosmetic care	X	X	X	X
	Oral dose forms	X	X	X	X
	Biomedical			X	X

Lithium

Lithium is a vertically-integrated technology business, based on both inorganic and organic lithium chemistries. While lithium is sold into a variety of end-markets, we have focused our efforts on energy storage, specialty polymers and pharmaceuticals.

The electrochemical properties of lithium make it an ideal material for portable energy storage in high performance applications, including heart pacemakers, cell phones, camcorders, personal computers and next-

generation technologies that combine cellular and wireless capabilities into a single device. Lithium is also being developed as the enabling element in advanced batteries for use in hybrid electric, plug-in hybrids and all-electric vehicles.

Organolithium products are sold to fine chemical and pharmaceutical customers who use lithium's unique chemical properties to synthesize high value-added products. Organolithiums are also highly valued in the specialty polymer markets as initiators in the production of synthetic rubbers and elastomers.

The following chart summarizes the major markets for various lithium products:

	Primary Inorganics	Specialty Inorganics	Lithium Metal/Ion Battery Materials	Organometallics	Intermediates
Fine Chemicals					
Pharmaceuticals, agricultural products	X		X	X	X
Polymers					
Elastomers, synthetic rubbers, industrial coatings				X	X
Energy Storage					
Non-rechargeable batteries, lithium ion batteries (rechargeable)	X	X	X		
Other					
Glass & ceramics, construction, greases & lubricants, air treatment, pool water treatment	X	X			

Industry Overview

Food Ingredients

Our BioPolymer business serves the texture, structure and physical stability ("TSPS") food ingredients market. TSPS ingredients impart physical properties to thicken and stabilize foods. There are many types of TSPS ingredients and a wide range of food groups served, including bakery, meats, dairy and convenience products. The industry is dispersed geographically, with the majority of our sales in Europe, North America and Asia.

Trends driving market growth include increasing consumer interest in healthier foods, greater convenience and growth in per capita consumption of processed foods in emerging markets. The trend toward health and convenience drives the need for more functional ingredients to impart desired food tastes and textures. We believe carrageenan and MCC, which address this need, are growing faster than the overall TSPS market. The global customer base for TSPS is relatively fragmented and includes large and small food processors. Consolidation among these customers has been a significant trend over the past several years. As a result, TSPS ingredient suppliers such as us, have focused on establishing alliances with market leaders with the goal of reducing costs, leveraging technology and expanding product offerings with key accounts.