

Polyols: Global Supply and Demand and Production Costs of Key Suppliers

Polyol consumption in the United States is increasing as the nation's population becomes more educated about the beneficial effects of these sweeteners. Polyols are popular alternative sweeteners (or "sugar replacers") derived from sucrose, lactose, or starch, but they contain a fraction of sugar's calories. Although polyols are less sweet than sugar, they meld nicely with high-intensity sweeteners such as aspartame and sucralose, often masking the aftertaste left by some high-intensity sweeteners.

Polyols are not metabolized completely by the body (which is why they are effectively lower-calorie than sugar), so they do not affect blood sugar levels the way sugar does. And because polyols do not interact with oral bacteria, they do not encourage tooth decay. Health professionals promote polyols as an effective way of lowering calorie intake and the body's glycemic response to sweetened foods (which is of critical concern to the increasing portion of our population that is diabetic).

Report Overview:

Health Benefits of Polyols

Industrial Uses of Polyols

Global Polyol Consumption

Table 2: Sugar-Free Gum Demand, by Country

U.S. Polyol Consumption

Table 3: U.S. Polyol Demand, 70-Percent Solution

Table 4: Breakdown of Total Estimated U.S. Polyol Consumption

Table 5: Total Estimated U.S. Polyol Consumption, by Type

Mexican Polyol Consumption

Table 6: Breakdown of Total Estimated Mexican Polyol Consumption

Table 7: Total Estimated Mexican Polyol Consumption, by Type

Canadian Polyol Consumption

Table 8: Breakdown of Total Estimated Canadian Polyol Consumption

Table 9: Total Estimated Canadian Polyol Consumption, by Type

Key Polyol Producers in North America, Asia, and Europe

Table 10: Summary of Cost Estimates for Polyols

North American Polyol Producers

Table 11: Estimated U.S. and Mexican Hydrogenation Capacities for Polyols (2001)

Table 12: Estimated U.S. and Mexican Hydrogenation Capacities for Polyols (Current)

SPI Polyols-Corn Products, Inc.

Table 13: SPI-CPI Liquid Maltitol Cost Comparison

Table 14: SPI-CPI Crystalline Maltitol Cost Comparison

Table 15: SPI-CPI Liquid Sorbitol Cost Breakdown

(continued)

Table 16: SPI-CPI Crystalline Sorbitol Cost Breakdown

Cargill

Table 17: Cargill Liquid Maltitol Cost Breakdown

Table 18: Cargill Crystalline Maltitol Cost Breakdown

Table 19: Cargill Liquid Maltitol Cost Comparison: U.S., Germany, and Italy

Table 20: Cargill Crystalline Maltitol Cost Comparison: U.S., Germany, and Italy

Roquette

Table 21: Roquette Liquid Maltitol Cost Breakdown for Gurnee Plant

Table 22: Roquette Crystalline Maltitol Cost Breakdown for Gurnee Plant

Table 23: Roquette Liquid Sorbitol Cost Comparison

Table 24: Roquette Crystalline Sorbitol Cost Comparison

Table 25: Roquette Liquid Maltitol Cost Comparison: U.S. and France

Table 26: Roquette Crystalline Maltitol Cost Comparison: U.S. and France

ADM

Table 27: ADM Liquid Sorbitol Cost Breakdown for Decatur Plant

Capacity Summary

Table 28: Estimated North American Polyol Capacity Utilization

Asian Polyol Producers

Global Bio-Chem Technology Group

Table 29: Global Sweeteners Capacity Breakdown

AKR/Sorini

Table 30: Sorini Capacity Breakdown

MC-Towa

Ueno Fine Chemicals Industry, Ltd.

Polyol Profiles

Mannitol Cost Estimate in Brazil

Xylitol Outlook

Xylitol Market Demand

Producers

Isomalt Outlook

Supply: Capacity and Production

Production Processes

Production Costs

Table 31: Isomalt Capacity and Production