**CALTAC CALCIUM CHLORIDE—SO PURE YOU CAN SEE IT.**

CalTAC Calcium Chloride is designed to meet increasingly stringent regulatory standards.

**Purity**

Meeting all Food Chemical Codex specifications for assay and impurity limits, CalTAC Calcium Chloride also keeps particulate matter well below maximum allowances specified by the General Provisions of the Food Chemical Codex:

General Provisions of FCC (Fourth Edition) “Soluble substances, when brought into solution, may show slight physical impurities, such as fragments of filter paper, fibers, and dust particles, unless excluded by definite tests or other requirements; however, it is a requirement that significant amounts of black specks, metallic chips, glass fragments, or other insoluble matter are not permitted.”

Filter discs obtained in standard tests of CalTAC Calcium Chloride and competitive samples (CaCl2-A and CaCl2-B) demonstrate the significant superiority of CalTAC Calcium Chloride purity.

**Solubility**

Controlled particle size—both smaller and more uniform—lets CalTAC Calcium Chloride dissolve faster and more completely, even in concentrations far higher than normally used.

**Handling**

Uniform granules, with virtually no fines, eliminate dusting, caking, bridging and flowability problems. Waste and cleanup problems are also minimized.

**CALTAC CALCIUM CHLORIDE—TECHNICAL DATA**

The product of modern technology and a rigidly controlled process, CalTAC Calcium Chloride sets standards previously unattained in food-grade calcium chlorides.

**Purity**

CalTAC Calcium Chloride meets all Food Chemical Codex specifications, and is well within required limits of impurities.
Particle Size and Uniformity
Particle size is controlled within a tighter range to produce both smaller and more uniform particles. As a result, CalTAC Calcium Chloride goes into solution faster and more completely, even in concentrations far higher than those of normal usage. Furthermore, CalTAC solutions—unlike other calcium chlorides—do not produce appreciable quantities of colored sediment.

Dusting/Flowability
Control of particle size to a narrow distribution virtually excludes fines, thereby reducing dusting problems in handling and mixing. Attendant problems of waste and clean up are significantly reduced. Flowability is improved, allowing virtually trouble-free machine feeding without caking.

CHEMICAL SPECIFICATIONS AND TYPICAL ANALYSIS

<table>
<thead>
<tr>
<th>Tests</th>
<th>Food Chemical Codex Limits</th>
<th>CalTAC Calcium Chloride Typical Analysis</th>
</tr>
</thead>
<tbody>
<tr>
<td>Appearance</td>
<td>—</td>
<td>Passes Test</td>
</tr>
<tr>
<td>Identification A</td>
<td>Passes Test</td>
<td>Passes Test</td>
</tr>
<tr>
<td>Identification B</td>
<td>—</td>
<td>Passes Test</td>
</tr>
<tr>
<td>Solubility</td>
<td>—</td>
<td>Passes Test</td>
</tr>
<tr>
<td>Assay (CaCl₂)</td>
<td>93.0–100.5%</td>
<td>95.3%</td>
</tr>
<tr>
<td>pH (1 in 20)</td>
<td>—</td>
<td>10.3</td>
</tr>
<tr>
<td>Limits of Impurities:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Lead (Pb)</td>
<td>5 mg/kg</td>
<td>&lt;5 mg/kg</td>
</tr>
<tr>
<td>Arsenic (As)</td>
<td>3 mg/kg</td>
<td>&lt;3 mg/kg</td>
</tr>
<tr>
<td>Magnesium and Alkali Salts</td>
<td>5.0% max.</td>
<td>2.2%</td>
</tr>
<tr>
<td>Fluoride (F)</td>
<td>0.004% max.</td>
<td>0.004%</td>
</tr>
</tbody>
</table>

CALTAC APPLICATIONS

<table>
<thead>
<tr>
<th>Industry</th>
<th>Function</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soft Drink Industry</td>
<td>Water treatment to reduce alkalinity</td>
</tr>
<tr>
<td>Vegetable Canning Industry</td>
<td>Used as a firming agent</td>
</tr>
<tr>
<td>Brewing Industry</td>
<td>To adjust pH, precipitate calcium oxalate, assist in protein precipitation, and adjust flavor</td>
</tr>
<tr>
<td>Dairy Products</td>
<td>Cheese coagulation</td>
</tr>
<tr>
<td>Other</td>
<td>General purpose food additive</td>
</tr>
</tbody>
</table>

CALTAC CALCIUM CHLORIDE PACKAGING AND APPLICATION DATA

CalTAC Calcium Chloride (FCC) is available in standard packages of 50 lb bags, 110 lb (50 kg) drums and 2000 lb supersacks. For assistance on specific applications or for information on ordering or other technical data, call toll free: 800-582-2537 or 1-908-859-2151.
About Avantor™ Performance Materials — formerly Mallinckrodt Baker

Avantor™ Performance Materials, formerly Mallinckrodt Baker, manufactures and markets high-performance chemistries and materials around the world under two well-known and respected brand names, J.T.Baker® and Mallinckrodt Chemicals®. These products are widely used in biotechnology and pharmaceutical production; in the manufacturing of semiconductors, flat panel displays and photovoltaic cells; and in research, academic and quality control laboratories. Based in Phillipsburg, New Jersey (USA), Avantor™ is owned by an affiliate of New Mountain Capital, LLC. For additional information please visit www.avantormaterials.com or follow www.twitter.com/avantor_news

Ordering, Information and Assistance:
Customer Service and Technical Service
Toll free: 800-582-2537 or 908-859-2151
Fax: 908-859-6905
www.avantormaterials.com

On the Web:
www.avantormaterials.com
Our Web site features ASK AVANTOR™, which includes live chat capabilities with customer service representatives.

Mailing Address:
Avantor Performance Materials, Inc.
222 Red School Lane
Phillipsburg, NJ 08865

Worldwide Locations

China: Avantor Performance Materials
Trading (Shanghai) Co., Ltd.
Site A 14/F Xin Mei Union Square
999 Pudong South Road
Pudong New Area
Shanghai, 200120 China
Tel: 86 21 58777258 Fax: 86 21 58777253
E-mail: sales.jtbs@covidien.com

Europe: Avantor Performance Materials B.V.
Teugseweg 20, 7418 AM
Deventer, The Netherlands
Tel: 31-570-687500 Fax: 31-570-687574
E-mail: jtbaker.nl@covidien.com

India: Avantor Performance Materials Chemicals
Private Ltd.
425-426, Chintamani Plaza,
Andheri Kurla Road
Chakala,
Andheri (East),
Mumbai – 400 099
Tel: +91-22-4215 2458 Fax: +91-22-4215 2465
E-mail: sales.jtbi@covidien.com

A-1201-2, 12th Floor, Kelana Brem Tower 1,
Jalan SS7/15 (Jalan Stadium), Kelana Jaya
47301 Petaling Jaya, Selangor, Malaysia
Tel: 60-3-780-30378 Fax: 60-3-780-30405
E-mail: sales.mbm@covidien.com

Mexico: Avantor Performance Materials S.A. de C.V.
Plomo 2
Fracc. Industrial Esfuerzo Nacional Xalostoc
CP 55320 Ecatepec, Estado de Mexico, Mexico
Tel: 5255-5699-0250 Fax: 5255-5755-2585
E-mail: mbi@covidien.com

North America: Avantor Performance Materials, Inc.
222 Red School Lane
Phillipsburg, NJ 08865
Tel: 1-800-582-2537
E-mail: www.avantormaterials.com

Korea: Avantor Performance Materials International,
Inc. Korea Branch
8th Floor, Wooduck Building
832-2 Yeoksam 1-dong, Gangnam-gu
Seoul, Korea, 135-750
Tel: 82-2-2052-0481 Fax: 82-2-571-5401
E-mail: sales.mbik@covidien.com

Lit & CALTAC

©2010 Avantor Performance Materials, Inc. All rights reserved. Mallinckrodt® is a trademark of Mallinckrodt Inc. Other trademarks are owned by Avantor Performance Materials, Inc. or its affiliates unless otherwise noted.