

AcrylateST

Esschem

Why Y2K?

Rarely a day goes by without the media reporting on why Y2K will or won't be a problem. Sometimes Y2K sounds like a sinister plan by computer programmers twenty years ago.

Actually, the programmers plan was to accommodate the needs of the expensive, power-limited memory chips of that time. To minimize the amount of memory used, computer codes had to be made as efficient

as possible. Therefore, programmers wrote all years in two digits, not worrying that at 12:01 on 1/1/00, the computer will need to decide whether the president is William McKinley or Bill Clinton.

Try Our 3 Steps to Y2K

Step 1: CERTIFICATION

We were pleased in 1998 when we could announce our certification under the ISO 9002 Series for quality systems. Achieving compliance to internationally accepted quality standards underlined our commitment to a program of continuous improvements. In 1999, Esschem also received its certification under Series EN 46002.

This new certification provides an additional plus for our customers—now and in the millennium. While the ISO 9002 Series is intended to be a general standard defining

quality system requirements, EN 46002 provides specific requirements for manufacturers of medical devices. Compliance with the ISO 9002 Series, together with the EN 46002 Series, is regarded as the generally accepted way of showing compliance with the safety principles of the Medical Device Directive of the European Common Market (CE marking). Although Esschem, as a bulk supplier, does not directly manufacture any medical devices, our certification to ISO 9002/EN 46002 provides an assist to our customers who have medical devices in need of the CE mark.

Step 2: EXPERIENCE AND NEW PRODUCTS

Isn't it comforting to know Esschem has been customizing materials for nearly 50 years? That's why we are able to offer an unmatched range of options for a variety of industries including dental, audiological, cosmetic and various

specialized polymer applications. Some recent new products include Audalite™ Dual Cure for hearing aid shells, EOEMA monomer for reduced odor in cosmetic and dental applications and polymer systems without phthalate plasticizers.

Step 3: RELIABILITY

You can look forward to the quality and service you have come to expect from Esschem. We have adopted the Responsible Care Initiative of the Synthetic Organic Chemical Manufacturers Association. With nearly 50 years behind us, customization, consistency and sensitivity to safety, regulatory issues and your production needs are built in.



Responsible Care®
A Public Commitment



ESSCHEM

P.O. BOX 1139

LINWOOD, PA

19061 U.S.A.



150 Years of Experience Make a Difference

JANUARY 2000

The Esschem story goes back to when Henry Daniel Justi and his mother emigrated to Philadelphia in 1850. He obtained employment in a shop where dentists took their instruments to be sharpened and repaired. In those days, a few dentists made artificial teeth and it was 13-year old Henry's duty to repair their crude molds. Henry, not satisfied with the crude and porous porcelain then available, experimented at home. He succeeded in compounding materials which produced teeth that were life-like in shade and texture.

After striking out on his own, spurred on by wide acceptance, Henry went on to exhibit his products at world fairs in Paris, Berlin and Vienna, where various awards were won.

Porcelain remained the staple of the H. D. Justi dental business until the advent of acrylic resins in 1937. In the December, 1941 issue of *Modern Plastics*, Henry D.'s grandson Henry M. Justi published an article on mass production of plastic teeth. In 1944 the Justi company announced that it would devote 100% of its facilities to the manufacture of acrylic teeth. By 1948 the revolutionary acrylic technology was broadened to hearing aid shells and other applications.

In 1957, the company began manufacturing acrylic polymers in Essington, PA under the name of Specialty Resins. With the Essington location, the change to Esschem was a natural one. In 1995, polymer

manufacturing operations were moved to a state of the art operation in Linwood, PA. The specialty materials group of Esschem (long dubbed Esstech) formally adopted its old nickname and took over the Essington facility where its specialties continue to include diluent and adhesive monomers, binder resins, glass fillers and custom syntheses. And 1998 saw the welcome addition of Specialty Glass, Inc. Many of our custom chemicals are used in FDA related applications. Acrylics remain a particular specialty, but our current range of custom products are far broader. What can we customize for you?

Y2K— What Comes Next?

Mike Norquist (COO)—At Esschem Co. we're proud of our heritage and excited about the future. Much of this special issue of *Acrylatest* celebrates the year 2000 by reflecting on past accomplishments that brought us to the millennium. My focus is on what you might expect from Esschem within the first five years of the 21st century.

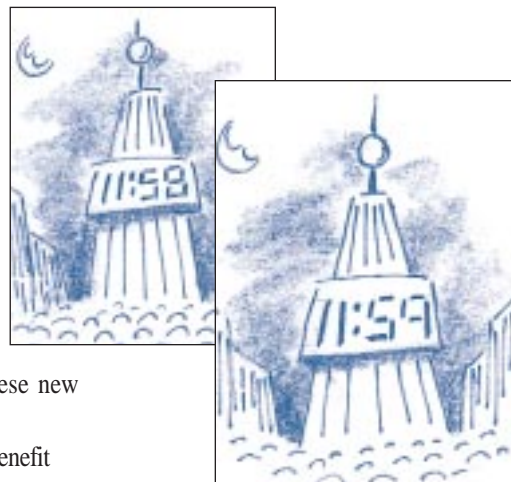
During five years of new polymer product development Esschem will introduce over one hundred new proprietary products based on your requests and feedback. Whether it be differences in particle size, molecular weight, bead composition, initiator levels or customized colors, every new iteration will receive a unique product code and, in many cases, exclusivity to a particular customer. In addition, we will be promoting a wide range of exciting

new "standard" polymers, monomers, silicones, colloids and light curing materials that are currently under development.

To meet our criteria, each of these new products must:

- provide a tangible customer benefit
- comply with appropriate regulatory parameters
- be available to our customers at a reasonable price

The next five years promise a continuing improvement in customer service, expanding on the successes of the past five years. We intend to sharpen our inventory management skills to be able to bring delivery times down to within days of your order—even on custom materials. Also, as electronic purchasing becomes more popular you can expect Esschem



to establish a customer service "desk" on the Internet for your order-placing convenience.

Esschem's commitment to quality systems and continuous improvement will remain our watchwords through 2005. You can expect our quality system to continue to give you the quality assurance of certification and compliance to ever-upgrading ISO/EN standards. In addition, our in-house testing capability will continue to grow.

More Visions

Tac Justi (CEO)—As all responsible specialty chemical producers have done, Esschem has dedicated substantial resources and staff hours to make sure that our critical production and administration systems and our supply lines will not be interrupted at the stroke of midnight on December 31. We will not be Cinderella.

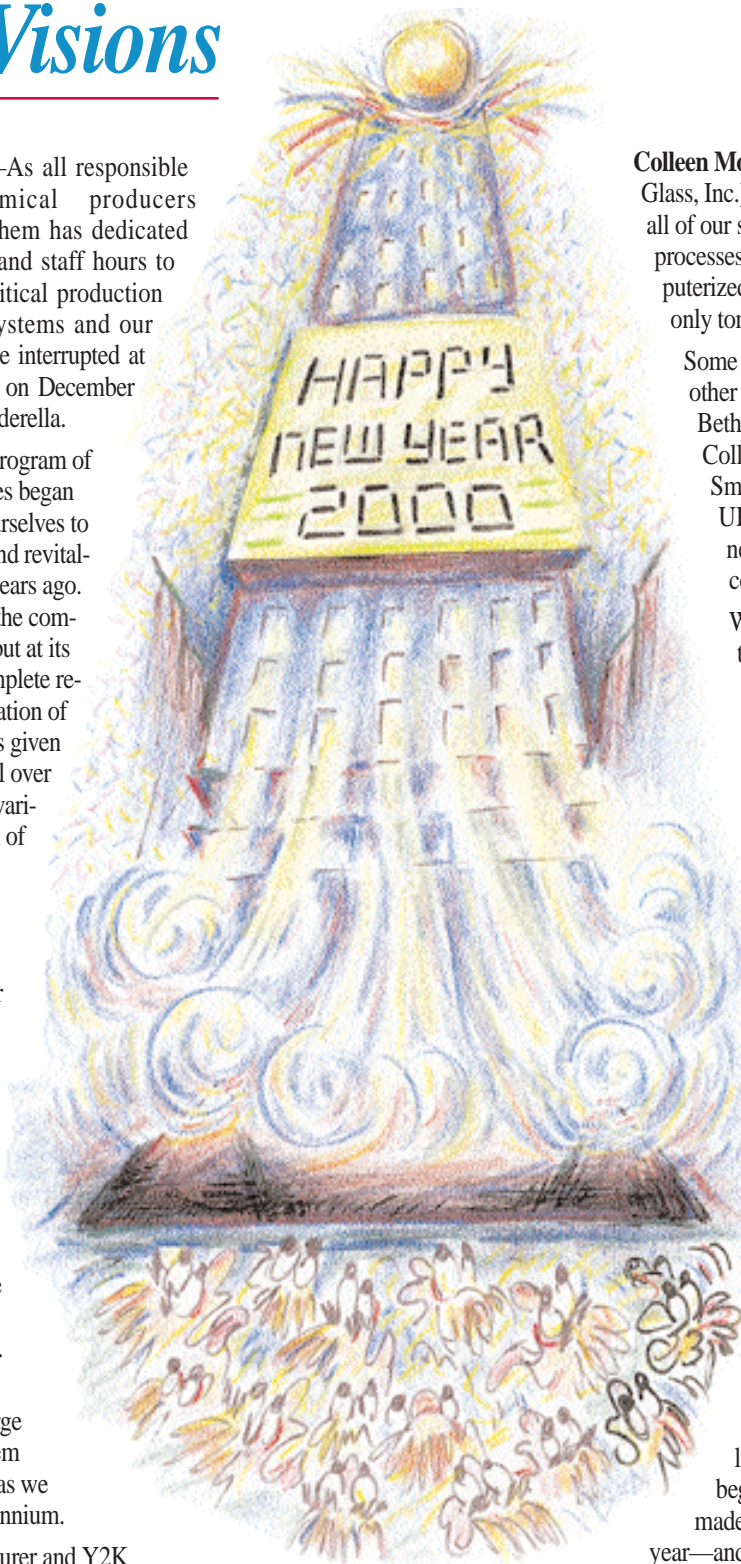
In many respects, our program of meeting Y2K challenges began when we committed ourselves to Esschem's relocation and revitalization program eight years ago. It is easy to understate the complexity of this project, but at its core, it entailed the complete re-engineering and automation of our processes. That has given us extraordinary control over a full range of process variables. Our certification of these new processes against the ISO 9002 and EN 46000 quality standards provides further testimony to our production control.

The more we have standardized our process and product controls, the better we can customize these products and reproduce them consistently to meet the increasingly exacting needs of our customers.

Customization through standardization ... in large part, that is how Esschem is fulfilling its mission as we approach the new millennium.

Steve Morrison (Treasurer and Y2K coordinator)—We have been proactive since 1998.

We've upgraded our systems where necessary and communicated with suppliers on Y2K. We are determined the chip won't win the battle—even if it's only the one in the coffee maker. I don't see any major upsets, but might avoid the ATM and the elevator at midnight.



Colleen Morissette (President of Specialty Glass, Inc.)—SGI is ready. We've contacted all of our suppliers and our glass production processes are customized—but not computerized. It's a new tomorrow—but only tomorrow.

Some thoughts from some of your other Esschem friends—including Beth Welsh, Georgina Clarke, Kandy Collins, Fred Rosenberg, Diane Smith and Gary Shaw at Acrytek, UK, who wants to do more work next year on special adhesive and cosmetic products.

We are determined to overcome the computer chips. Our new facility gave us a head start. We see few internal problems thanks to evaluation and preparation. We've made sure the lab is as ready as the plant. All of our outside suppliers claim to be ready. We hope our customers' other suppliers are as fully prepared.

Possible concerns. Most people will naturally be concerned about inventory, and we will work with you to stock but not overstock. We suggest you keep receipts and faxes and maybe think twice about elevators. We are concerned about paranoia that creates over-buildup of material. It's just another year.

Individual millennium wishes: win a million, eat more, exercise less and learn Spanish. It's a new beginning—but only a day later. I made my millennium resolutions this year—and got 2 out of 3. Most major companies (including us) seem ready. The Y2K consultants are the ones who predict the problem. But I haven't bought a generator yet—have they?

We will be starting up the reactors for a final check on Sunday January 2.

To The Millennium

ESSCHEM'S HOLIDAY SCHEDULE FOR 2000

For The First Time This Century...

...we're putting together the scheduling information you need to be sure you receive the best possible service during the year. Most of our holidays are probably similar to yours. However, we

routinely shut the plant down each year on two occasions. With our 24 hour processing schedule, our maintenance shut down allows us to serve you better by operating at top quality for the

balance of the year. Getting you the schedule in advance allows you to plan your inventory and avoid any last minute concerns. Should special problems arise, we're planning for that, too.

SHUTDOWN TIMES

We expect to close the plant from Monday, August 1 to Friday August 12 for preventative maintenance projects. Then, later in the year, we will celebrate the holiday season by closing from Thursday, December 24 through the new year. We reopen on January 4, 2001. And we look forward to wishing you a Happy New Year.

HOLIDAYS

Monday, February 21	Presidents' Day
Monday, May 29	Memorial Day
Monday, July 3 and Tuesday, July 4	Independence Day
Monday, September 4	Labor Day
Thursday, November 23 and Friday, November 24	Thanksgiving

EMERGENCY MEASURES

Even during shutdown periods, voice mail and fax (1-800-POLYASK) stay on the job. Our Website (www.esschem.com) and our E-mail stand ready. Let's make 2000 the perfect lead in to a wonderful 21st century.