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The logo for Chemical Concepts, featuring a stylized 'C' made of two overlapping arcs, one red and one black, followed by the text 'Chemical Concepts' in a serif font, with 'Chemical' in black and 'Concepts' in red.

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# SILICONE TECHNOLOGY FOR ROLLER APPLICATIONS

LIQUID SILICONES WITH CUSTOMIZABLE PHYSICAL  
PROPERTIES FOR UNIQUE APPLICATIONS

## ROLLERS



Liquid silicones from CHT feature enhanced physical properties versus high consistency rubber and minimize manufacturing interruptions due to roller failure. CHT's silicones encompass applications from copiers to large industrial manufacturing.

Silicone rollers have been traditionally made from high consistency rubber or gum stock rubber. Liquid silicones by CHT have proved to create process advantages and ease of manufacturing.

Since liquid silicones can be pumped at much lower pressures, time is reduced when filling molds compared to using gum stock or paste materials. Additionally, CHT's liquid silicones are easily processed when used with sleeves or in applications requiring thin roll coats.

CHT's liquid silicones are available in a wide variety of durometer ranges, as well as thermally and electrically conductive grades. Liquid silicones also provide better wear resistance for both optical and graphic plastic films.

### Rubber Roller Applications

- ▶ Photocopy rollers
- ▶ Laser Printer Rollers
- ▶ Photographic Imaging Rollers
- ▶ Printing Rollers
- ▶ Currency Dispensing Rollers
- ▶ Film and Microfilm Rollers
- ▶ Magnetic Tape Capstans
- ▶ Medical Chart Recorder Rollers
- ▶ High-Speed Mail Sorting Rollers
- ▶ Cleaning (Sticky) Rollers
- ▶ Medical Imaging Rollers



### Benefits of CHT's Silicone Technology

- ▶ Liquid silicone systems eliminate knit lines resulting in seamless roller production and minimize defects in finished rollers
- ▶ Excellent machinability and grindability
- ▶ Customizable cure time to meet different production requirements
- ▶ Low viscosity for ease in processing
- ▶ Low compression set
- ▶ Wide selection of durometer specifications from 20 to 80 (Shore A)
- ▶ Good chemical resistance
- ▶ Thermally conductive grades available
- ▶ High operating temperature silicones available up to 260C

### Do you need technical support?

Please contact us for additional technical information, product pricing, and packaging options.

| High Durometer Silicone Grades                                                                                                                                                                                      |           |           |                 |                        |                        |                              |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------|-----------|-----------------|------------------------|------------------------|------------------------------|
| Product                                                                                                                                                                                                             | Mix Ratio | Cure Type | Catalyzed Color | Durometer <sup>1</sup> | Viscosity <sup>1</sup> | Work Life @ 25C <sup>1</sup> |
| QM 262                                                                                                                                                                                                              | 10:1      | Addition  | Blue            | 60, Shore A            | 35,000 cps             | 60 mins                      |
| QM 264                                                                                                                                                                                                              | 10:1      | Addition  | Light Blue      | 60, Shore A            | 110,000 cps            | 75 mins                      |
| QM 270                                                                                                                                                                                                              | 10:1      | Addition  | Beige           | 70, Shore A            | 50,000 cps             | 70 mins                      |
| QM 280                                                                                                                                                                                                              | 10:1      | Addition  | Beige           | 80, Shore A            | 90,000 cps             | 60 mins                      |
| Medium Durometer Silicone Grades                                                                                                                                                                                    |           |           |                 |                        |                        |                              |
| Product                                                                                                                                                                                                             | Mix Ratio | Cure Type | Catalyzed Color | Durometer <sup>1</sup> | Viscosity <sup>1</sup> | Work Life @ 25C <sup>1</sup> |
| QM 230                                                                                                                                                                                                              | 10:1      | Addition  | Blue            | 33, Shore A            | 10,000 cps             | 32 mins                      |
| QM 240T                                                                                                                                                                                                             | 10:1      | Addition  | Translucent     | 40, Shore A            | 60,000 cps             | 45 mins                      |
| Thermally Conductive Silicone Grades                                                                                                                                                                                |           |           |                 |                        |                        |                              |
| Product                                                                                                                                                                                                             | Mix Ratio | Cure Type | Catalyzed Color | Durometer <sup>1</sup> | Viscosity <sup>1</sup> | Work Life @ 25C <sup>1</sup> |
| QSiL 244                                                                                                                                                                                                            | 1:1       | Addition  | Brown           | 45, Shore A            | 140,000 cps            | > 24 hours (gel time)        |
| QSiL 266                                                                                                                                                                                                            | 1:1       | Addition  | Brown           | 60, Shore A            | 100,000 cps            | > 24 hours (gel time)        |
| <ul style="list-style-type: none"> <li><sup>1</sup>Typical catalyzed properties</li> <li>Custom grades can be designed to meet requirements of fusor, graphic film and optical film roller applications.</li> </ul> |           |           |                 |                        |                        |                              |

With unchanging quality, service, and innovation, finding the right silicone for your application is not limited to CHT's product portfolio. CHT's expert technologists accept opportunities to either modify specifications in a current product or custom formulate a new one to meet your exact requirements.



## QUALITY | SERVICE | INNOVATION

### WE TAKE PRIDE IN SERVING YOU

- ▶ Take advantage of consulting one on one with our sales and technology team.
- ▶ CHT demonstrates a distinctive flexibility, whether it's modifying existing product specifications or developing a new product specifically designed for your unique application.
- ▶ Our worldwide distributor network provides local inventory, which means reduced transit times and lower shipping costs for you.
- ▶ Rely on our prompt, product development time.
- ▶ Our team welcomes your feedback because we are always striving to make innovative improvements.

CHT is committed to providing you with superior service and the highest quality silicone products available. Our certification to the ISO 9001 standard ensures that we are always working towards continual improvement in every way.

We also have a stringent product testing protocol that uses ASTM standard test methods. Based on your specifications, products must meet certain criteria throughout production and prior to its release. A Certificate of Analysis will accompany every shipment you receive.



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linkedin.com/showcase/cht-silicone-experts

To view CHT's complete product portfolio or to request product samples, please visit [www.silicone-experts.cht.com](http://www.silicone-experts.cht.com)

## CALL US TOLL-FREE TODAY

Phone: 1-800-852-3147

# CHT

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