WACKER SILICONES

ELASTOSIL®

# ELASTOSIL® M MOLD-MAKING COMPOUNDS FOR MAXIMUM PRECISION

CREATING TOMORROW'S SOLUTIONS

# NOTHING IS IMPOSSIBLE.

ELASTOSIL® M mold-making compounds are ideal for a wide range of applications in the following fields:

- Prototyping
- Industrial mass production
- Restoration work
  Art
  Handicrafts
- Museums
  Archaeology
  Art
- Hobbies

# A REPRODUCTION CAN ONLY BE AS GOOD AS ITS MOLD.

**ELASTOSIL® M mold-making compounds are two-component, room-temperature-vulcanizing silicone rubbers (RTV-2) with excellent fidelity of reproduction. There are suitable grades for making all kinds of molds, no matter how intricate, and for use with all types of reproduction material, whether wax, plaster, concrete, casting resin or low-melting metal alloy.**

Thanks to their great flexibility and outstanding release properties, ELASTOSIL® M rubbers separate very easily from the model. Their high resistance to the reproduction material means they can be used over and over again.

All these excellent processing properties make ELASTOSIL® M compounds indispensable for mold making: whether for industrial manufacturers or for artists and craftsmen.

This leaflet outlines the properties and the wide range of applications of ELASTOSIL® M mold-making compounds.

Please don't hesitate to contact our technical support team if you have specific questions concerning your application.

Call us. We'll be glad to help.

# THE CHOICE IS YOURS.

| | Consistency/Color of the cured rubber | Properties of the cured rubber |
|---|---|---|
| **ELASTOSIL®** | | |
| **Condensation-curing** | | |
| M 1470 | Kneadable, pink | Hard; high mechanical strength |
| M 3500 | Spreadable, non-sag, translucent | Soft; extremely high extensibility |
| M 3502 | Spreadable, non-sag, white | High extensibility and mechanical |
| M 4400 | Pourable, pale yellow | Soft; high extensibility |
| M 4440 | Pourable, beige | Moderately hard |
| M 4470 | Pourable, reddish-brown | Hard |
| M 4500 | Pourable, white | Very soft; very high extensibility and high mechanical strength |
| M 4503 | Pourable, white | Soft; high extensibility and mech |
| M 4511 | Pourable, white | Very soft; very high extensibility |
| M 4512 | Pourable, white | Soft; very high extensibility and |
| M 4514 | Pourable, white | Soft; very high extensibility and |
| M 4541 | Pourable, white | Moderately hard; high extensibility mechanical strength |
| **Addition-curing** | | |
| M 4370 A/B | Pourable, reddish-brown | Hard |
| M 4600 A/B | Pourable, translucent | Soft; very high extensibility and |
| M 4601 A/B | Pourable, reddish-brown | Soft; very high extensibility and |
| M 4615 A/B | Pourable, blue | Very soft; very high extensibility; |
| M 4630 A/B | Pourable, white | Flexible; excellent mechanical str |
| M 4641 A/B | Pourable, transparent | Moderately hard; high mechanical |
| M 4642 A/B | Pourable, deep red | Moderately hard; high extensibility |
| M 4643 A/B | Pourable, gray | Moderately hard; high mechanical |
| M 4644 A/B | Pourable, transparent | Moderately hard; high mechanical |
| M 4645 A/B | Pourable, transparent | Moderately hard; high mechanical |
| M 4647 A/B | Pourable, crystal clear | Moderately hard; high mechanical |
| M 4648 A/B | Pourable, translucent | Moderately hard; high mechanical |
| M 4670 A/B | Pourable, beige | Hard; high mechanical strength |

| | Special features |
|---|---|
| | General-purpose grade |
| and mechanical strength | For skin molds |
| strength | For skin molds; excellent resistance to polyester and polyurethane resins |
| | General-purpose grade |
| | General-purpose grade |
| | High thermostability and thermal conductivity |
| | High resistance to polyester resins |
| anical strength | General-purpose grade |
| and mechanical strength | Excellent resistance to polyester and polyurethane resins |
| mechanical strength | Excellent resistance to polyester and polyurethane resins |
| mechanical strength | Excellent resistance to polyester and polyurethane resins |
| and very high | Excellent resistance to polyester and polyurethane resins |

| | |
|---|---|
| | High thermostability and thermal conductivity |
| mechanical strength | General-purpose grade |
| mechanical strength | General-purpose grade |
| high mechanical strength | General-purpose grade, especially for glore molds |
| engtth | General-purpose grade; ideal for making concrete moldings |
| strength | High resistance to polyurethane and epoxy resins |
| and v. high mech. strength | General-purpose grade |
| strength | High resistance to polyurethane and epoxy resins |
| strength; in-mold release | Excellent resistance to polyurethane and epoxy resins |
| strength; in-mold release | Excellent resistance to polyurethane and epoxy resins |
| strength | Excellent resistance to polyurethane and epoxy resins |
| strength | Excellent resistance to polyurethane and epoxy resins |
| | High resistance to polyurethane and epoxy resins |

| Viscosity of the ready-to-use mix | Density (DIN 53 479 A) | Hardness (DIN 53 505) | Tensile strength (DIN 53 504 S3 A) |
|---|---|---|---|
| [mPa s] | [g/cm²] | [Shore A] | [N/mm²] |
| > 1,000,000 | 1.28 | 50 | 4.5 |
| > 1,000,000 | 1.10 | 20 | 4.0 |
| > 1,000,000 | 1.24 | 26 | 4.5 |
| 25,000 | 1.30 | 23 | 2.0 |
| 20,000 | 1.22 | 37 | 2.5 |
| 10,000 | 1.44 | 60 | 4.5 |
| 20,000 | 1.20 | 14 | 3.0 |
| 40,000 | 1.16 | 25 | 5.0 |
| 20,000 | 1.22 | 12 | 3.5 |
| 25,000 | 1.19 | 20 | 3.5 |
| 25,000 | 1.25 | 25 | 4.5 |
| 30,000 | 1.16 | 32 | 5.0 |
| 8,000 | 1.43 | 55 | 3.0 |
| 15,000 | 1.10 | 20 | 7.0 |
| 20,000 | 1.13 | 28 | 6.5 |
| 5,000 | 1.03 | 13 | 3.0 |
| 20,000 | 1.13 | 28 | 6.5 |
| 30,000 | 1.07 | 43 | 4.5 |
| 15,000 | 1.14 | 37 | 7.0 |
| 25,000 | 1.35 | 48 | 5.0 |
| 50,000 | 1.07 | 40 | 5.5 |
| 35,000 | 1.06 | 40 | 5.0 |
| 70,000 | 1.02 | 45 | 4.5 |
| 15,000 | 1.11 | 36 | 6.0 |
| 80,000 | 1.34 | 55 | 5.5 |

| Elongation at break (DIN 53 504 S3 A) | Tear resistance (ASTM D 624 B) | Linear shrinkage after 7 days |
|---|---|---|
| [%] | [N/mm] | [%] |
| 230 | > 10 | 0.2 |
| 700 | > 30 | 0.6 |
| 450 | > 23 | 0.4 |
| 250 | > 3 | 0.7 |
| 200 | > 3 | 0.4 |
| 120 | > 4 | 0.8 |
| 450 | > 15 | 0.6 |
| 350 | > 20 | 0.5 |
| 600 | > 18 | 0.4 |
| 500 | > 24 | 0.4 |
| 450 | > 25 | 0.4 |
| 400 | > 30 | 0.4 |
| 130 | > 4 | < 0.1 |
| 800 | > 20 | < 0.1 |
| 700 | > 30 | < 0.1 |
| 700 | > 10 | < 0.1 |
| 700 | > 30 | < 0.1 |
| 300 | > 28 | < 0.1 |
| 550 | > 30 | < 0.1 |
| 300 | > 10 | < 0.1 |
| 400 | > 28 | < 0.1 |
| 330 | > 28 | < 0.1 |
| 250 | > 10 | < 0.1 |
| 400 | > 20 | < 0.1 |
| 300 | > 12 | < 0.1 |

Wacker Chemie AG is certified to ISO 9001 and ISO 14001. The Elastomers Business Unit of the WACKER SILICONES Business Division is certified to ISO/TS 16949-2002.

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