

# CERTIFIED MATERIALS

The tables below (valid as of October 2017) provide an overview of our materials that are certified for use in especially demanding applications. The content is continually updated.

| Certificate   | Test Lab | Area of Application    | Material No. | Elastomer   | Shore A Hardness | Colour |
|---|----------|------------------------|--------------|-------------|------------------|--------|
| <b>Gas devices and equipment installed in the home and household appliances</b> |          |                        |              |             |                  |        |
| DIN EN 549  | DVGW     | B1/H3 (0 to +80 °C)    | NB 90 18 03  | NBR         | 90 ± 5           | Black  |
| DIN EN 549  | DVGW     | B1/H3 (0 to +80 °C)    | NB 70 28 22  | NBR         | 70 ± 5           | Black  |
| DIN EN 549  | DVGW     | B2/H3 (-20 to +80 °C)  | NB 70 28 07  | NBR         | 70 ± 5           | Black  |
| DIN EN 549  | DVGW     | B2/H3 (-20 to +80 °C)  | NB 70 27 17  | NBR         | 70 ± 5           | Black  |
| DIN EN 549  | DVGW     | C2/H3 (-20 to +100 °C) | HN 70 27 04  | HNBR        | 70 ± 5           | Black  |
| DIN EN 549  | DVGW     | C2/H3 (-20 to +100 °C) | HN 70 18 10  | HNBR        | 70 ± 5           | Black  |
| DIN EN 549  | DVGW     | D2/H3 (-20 to +125 °C) | HN 70 78 01  | HNBR        | 70 ± 5           | Yellow |
| DIN EN 549  | DVGW     | E1/H3 (0 to +150 °C)   | FP 80 27 01  | FKM         | 80 ± 5           | Black  |
| DIN EN 549  | DVGW     | E1/H3 (0 to +150 °C)   | FP 80 18 01  | FKM         | 80 ± 5           | Black  |
| DIN EN 549  | DVGW     | E1/H3 (0 to +150 °C)   | FP 80 18 14  | FKM         | 80 ± 5           | Green  |
| <b>Gas supply systems and pipelines</b>   |          |                        |              |             |                  |        |
| DIN EN 682  | DVGW     | GBL (-15 to +50 °C)    | NB 70 27 32  | NBR         | 70 ± 5           | Black  |
| <b>Drinking water</b>   |          |                        |              |             |                  |        |
| DVGW type examination certificate   | DVGW     | WA/WB                  | EP 70 39 01  | EPDM perox. | 70 ± 5           | Black  |
| ACS   | eurofins |                        | EP 70 39 01  | EPDM perox. | 70 ± 5           | Black  |
| BS6920  | WRAS     | to +85 °C              | EP 70 39 01  | EPDM perox. | 70 ± 5           | Black  |
| <b>Water supply and drainage applications</b>                                   |          |                        |              |             |                  |        |
| DVGW type examination certificate   | DVGW     | WA/WB                  | EP 70 39 01  | EPDM perox. | 70 ± 5           | Black  |

| Certificate                            | Test Lab      | Specifications                             | Material No. | Elastomer   | Shore A Hardness | Colour    |
|--|---------------|--|--------------|-------------|------------------|-----------|
| <b>Gaseous oxygen</b>                  |               |  |              |             |                  |           |
| DIN EN 1797/<br>ISO 21010              | BAM           | +100 °C / 25 bar<br>> +100 to +150 °C / 20 | FP 75 94 11  | FKM         | 75 ± 5           | Green     |
| <b>Food and pharmaceutical contact</b> |               |  |              |             |                  |           |
| FDA 21 CFR                             | CERISIE       | 177.2600                                   | EP 70 27 03  | EPDM perox. | 70 ± 5           | Black     |
| FDA 21 CFR                             | SGS Fresenius | 177.2600                                   | SI 70 28 03  | VMQ         | 70 ± 5           | Red brown |
| FDA 21 CFR                             | SGS Fresenius | 177.2600                                   | SI 70 18 07  | VMQ         | 70 ± 5           | Red brown |
| FDA 21 CFR                             | SGS Fresenius | 177.2600                                   | SI 70 50 03  | VMQ         | 70 ± 5           | Red brown |
| FDA 21 CFR                             | SGS Fresenius | 177.2600                                   | SI 70 27 14  | VMQ         | 70 ± 5           | Red brown |
| FDA 21 CFR                             | SGS Fresenius | 177.2600                                   | EP 70 39 01  | EPDM perox. | 70 ± 5           | Black     |
| FDA 21 CFR                             | SGS Fresenius | 177.2600                                   | SI 60 41 01  | VMQ         | 60 ± 5           | Red brown |
| FDA 21 CFR                             | SGS Fresenius | 177.2600                                   | FP 75 94 12  | FKM perox.  | 75 ± 5           | Black     |
| BfR (1935/2004 EG)                     | SGS Fresenius | Recommendation XV                          | SI 70 18 07  | VMQ         | 70 ± 5           | Red brown |
| BfR (1935/2004 EG)                     | SGS Fresenius | Recommendation XV                          | SI 70 50 03  | VMQ         | 70 ± 5           | Red brown |
| BfR (1935/2004 EG)                     | SGS Fresenius | Recommendation XV                          | SI 70 27 14  | VMQ         | 70 ± 5           | Red brown |
| LFGB (1935/2004 EG)                    | SGS Fresenius | Recommendation XXI                         | EP 70 39 01  | EPDM perox. | 70 ± 5           | Black     |
| LFGB (1935/2004 EG)                    | SGS Fresenius | Recommendation XV                          | SI 60 41 01  | VMQ         | 60 ± 5           | Red brown |
| LFGB (1935/2004 EG)                    | SGS Fresenius | Recommendation XXI                         | FP 75 94 12  | FKM perox.  | 75 ± 5           | Black     |
| CIP-/SIP suitability                   | ECOLAB        |  | EP 70 39 01  | EPDM perox. | 70 ± 5           | Black     |
| WFI suitability                        | ECOLAB        |  | EP 70 39 01  | EPDM perox. | 70 ± 5           | Black     |
| USP Class VI - 121 °C                  | BSL           | Chapter 88 (in vivo)                       | EP 70 39 01  | EPDM perox. | 70 ± 5           | Black     |
| USP 32                                 | BSL           | Chapter 87 (in vitro)                      | EP 70 39 01  | EPDM perox. | 70 ± 5           | Black     |
| 3-A Sanitary Standard                  | CERISIE       | Class I                                    | FP 75 94 12  | FKM perox.  | 75 ± 5           | Black     |
| 3-A Sanitary Standard                  | CERISIE       | Class II                                   | EP 70 39 01  | EPDM perox. | 70 ± 5           | Black     |
| CIP-/SIP suitability                   | ECOLAB        |  | FP 75 94 12  | FKM perox.  | 75 ± 5           | Black     |
| WFI suitability                        | ECOLAB        |  | FP 75 94 12  | FKM perox.  | 75 ± 5           | Black     |

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