

Declaration of Compliance



ECON Premium ball valves Fig. 7442, 7542, 7642 and 7742

Eriks Flow Control herewith declares that the above mentioned ball valves meet the requirements as defined in:

- European Regulation (EC) No. 1935/2004 (Food Contact Materials)
- European Regulation (EC) No. 2023/2006 (Good Manufacturing Practice)

Product: Stainless steel 3-piece ball valve, figure numbers: 7442, 7542, 7642 and 7742

The body, ball, stem and seats are the only valve parts intended to come in contact with food.

Migration test results stainless steel valve parts

- Body (ASTM A351-CF8M)
- Ball (ASTM A351-CF8M)
- Stem (AISI-316)

Migration test protocol according to CM/Res(2013)9, Specific release of Metals

| Method | Parameter | Analysis principle | Migration conditions for the 3 successive migration steps | Result |
|--------------|------------------------------------|--|---|--------|
| EPA 3052 mod | Preparation for migration (metals) | Exposure to 0,5% citric acid by article filling ICP-MS | 1 hour / 100°C | Pass |

Report: 392-2017-00192401ver2_MP_EN

Migration test results PTFE seats

Migration test protocol according to EU 10/2011 (EN1186), Overall Migration

| 3M Dyneon TF 4103 seats | | | | | |
|-------------------------|---------------|--------------------|-----------|---------------------------------|--------|
| Food simulant | Contact foods | Time / Temperature | Technique | OML-value (mg/dm ²) | Result |
| A - Ethanol 10% | Aqueous food | 2 hours / 80° C | Immersion | < 10 | Pass |
| B - Acetic acid 3% | Acidic food | 2 hours / 100° C | Immersion | < 10 | Pass |
| D2 - Olive oil | Fatty food | 2 hours / 100° C | Immersion | < 10 | Pass |

Report No.: 392-2017-00278201_MP_EN

| 3M Dyneon TF 4215 seats | | | | | |
|-------------------------|---------------|--------------------|-----------|---------------------------------|--------|
| Food simulant | Contact foods | Time / Temperature | Technique | OML-value (mg/dm ²) | Result |
| A - Ethanol 10% | Aqueous food | 4 hours / 100° C | Immersion | < 10 | Pass |
| B - Acetic acid 3% | Acidic food | 4 hours / 100° C | Immersion | < 10 | Pass |
| D2 - Olive oil | Fatty food | 4 hours / 80° C | Immersion | < 10 | Pass |

Report No.: 392-2017-00300701_MP_EN

| 3M Dyneon TFM 1600 seats | | | | | |
|--------------------------|---------------|--------------------|-----------|---------------------------------|--------|
| Food simulant | Contact foods | Time / Temperature | Technique | OML-value (mg/dm ²) | Result |
| A - Ethanol 10% | Aqueous food | 2 hours / 100° C | Immersion | < 10 | Pass |
| B - Acetic acid 3% | Acidic food | 2 hours / 100° C | Immersion | < 10 | Pass |
| D2 - Olive oil | Fatty food | 2 hours / 80° C | Immersion | < 10 | Pass |

Report No.: 392-2017-00209602_MP_EN

Migration test protocol according to EU 10/2011 (EN1186), Specific Migration

| 3M Dyneon TF 4103 seats | | | |
|---------------------------|-------------------------------------|-------------------|--------|
| Parameter | | SML-value (mg/kg) | Result |
| Tetrafluoroethylene (TFE) | Worst case calculation of migration | < 0,05 | Pass |

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| 3M Dyneon TF 4215 seats | | | |
|---------------------------|-------------------------------------|-------------------|--------|
| Parameter | | SML-value (mg/kg) | Result |
| Tetrafluoroethylene (TFE) | Worst case calculation of migration | < 0,05 | Pass |

Report No.: 392-2017-00300701_MP_EN

| 3M Dyneon TFM 1600 seats | | | |
|---------------------------|-------------------------------------|-------------------|--------|
| Parameter | | SML-value (mg/kg) | Result |
| Tetrafluoroethylene (TFE) | Worst case calculation of migration | < 0,05 | Pass |

Report No.: 392-2017-00209602_MP_EN

Migration test results PEEK seats - Solvay KetaSpire KT-820 NT seats



Migration test protocol according to EU 10/2011 (EN1186), Overall Migration (repeated use)

| Food simulant | Contact foods | Time / Temperature | Technique | OML-value (mg/dm ²) | Result |
|--------------------|---------------|--|--------------------|---------------------------------|--------|
| A - Ethanol 10% | Aqueous food | 3x 4 hours / 90° C | Immersion, 3 times | < 10 | Pass |
| B - Acetic acid 3% | Acidic food | 3x 4 hours / 100° C | Immersion, 3 times | < 10 | Pass |
| D2 - Olive oil | Fatty food | 2 hours / 175° C 4 hours / 175° C 6 hours / 175° C | Immersion, 3 times | < 10 | Pass |

Report No.: 392-2021-00636901_MP_EN

Migration test protocol according to EU 10/2011 (EN1186), Specific Migration (repeated use)

| Parameter | Food simulant | Migration tests | SML-value (mg/kg) | Result |
|--------------------------|------------------|-----------------|-------------------|--------|
| Hydroquinon | A - 10% Ethanol | 3 times | < 0,6 | Pass |
| 4,4-difluorobenzophenone | D2 - 95% Ethanol | 3 times | < 0,5 | Pass |
| Diphenyl sulfone | D2 - 95% Ethanol | 3 times | < 3 | Pass |

Report No.: 392-2021-00636901_MP_EN

Extraction test method according to CFR 21§177.1550, overall extraction

| Test and migration conditions | Requirements (mg/inch ²) | Result |
|--|--------------------------------------|--------|
| Extraction in Distilled water - Reflux temperature for 2 hours | < 0,2 | Pass |
| Extraction in 50% Ethanol - Reflux temperature for 2 hours | < 0,2 | Pass |
| Extraction in Ethyl acetate - Reflux temperature for 2 hours | < 0,2 | Pass |
| Extraction in n-heptane - Reflux temperature for 2 hours | < 0,2 | Pass |

Report No.: 392-2021-00636901_MP_EN



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