

Specification DURAN® Glass

We hereby declare that the product:

HIRSCHMANN DURAN® Glass

(article number/s: see Appendix 1)

is in conformity with the requirements of the following standards and reference norms:

Relevant standards and reference works:

- ASTM-E438-1992
- Pharmacopeia

Harmonized reference norms:

- ISO 3585
- DIN 12116
- ISO 1776
- ISO 719
- ISO 720
- ISO 695
- DIN 52314:1977-11
- DIN 52326
- ISO 7991:1997

Manufacturer:

HIRSCHMANN LABORGERÄTE
HAUPTSTRASSE 7-15 · 74246 EBERSTADT

We hereby confirm, that the properties of HIRSCHMANN DURAN® Glass comply with the requirements of ISO 3585.

Trade name: DURAN®

Chemical and physical properties:

DURAN® Glass is practically inert. However an ion exchange between the medium and the glass can not be excluded.

ASTM-Compliance:

DURAN® Glass is compliant with "Type I, Class A low-expansion borosilicate glass" as defined by ASTM-E438-1992.

Pharmacopoeial compliance:

DURAN® glass is classified as a "Type I neutral glass" as defined by the current editions of the following pharmacopoeias: USP <660> Containers – Glass Ph. Eur. (3.2.1) Glass Containers for Pharmaceutical Use JP <7.01> Test for Glass Containers for Injections.

Handling:

Standard application: Do not heat above 500 °C.

T_g DURAN®: 525 °C

If heated above 525 °C, the material softens.

Recommended storage conditions:

According to USP <659> "Packaging and Storage Requirements", articles must be protected from moisture, freezing, excessive heat and from light during shipping and distribution.

Possible hazard:

DURAN® is no dangerous material and DURAN® has no health-threatening effects. DURAN® has no dangerous ingredients corresponding to legal chemical requirements and to hazardous materials regulations in actual issuance. DURAN represents no danger to human health or the environment.

2025-06-12



Kirsten Hirschmann

President & CEO

Person Responsible for Regulatory Compliance

The following article numbers are summarized under product group HIRSCHMANN DURAN® Glass:

No.	Description
220 01 xx*	MEASURING CYLINDERS B SHORT LINE AMBER STAIN GRADUATION
221 01 xx*	MEASURING CYLINDERS A CC MAIN POINT RING GRADUATION AMBER STAIN GRADUATION
222 01 xx*	MEASURING CYLINDERS A CC SB MAIN POINT RING GRADUATION BLUE GRADUATION
223 01 xx*	MEASURING CYLINDERS B SHORT LINE BLUE GRADUATION
224 01 xx*	MEASURING CYLINDERS A CC MAIN POINT RING GRADUATION BLUE GRADUATION
224 51 xx 19*	MEASURING CYLINDERS ASPIN DURAN
226 01 xx*	MEASURING CYLINDERS PLASTIC SOCKET B BLUE GRADUATION
227 01 xx*	MEASURING CYLINDERS A CC PLASTIC SOCKET MAIN POINT RING GRADUATION BLUE GRADUATION
233 01 xx*	MEASURING CYLINDERS DURAN B POLY STOPPER BLUE GRADUATION
234 01 xx*	MEASURING CYLINDERS DURAN A CC MAIN POINT RING GRADUATION POLY STOPPER BLUE GRADUATION
234 02 xx*	MEASURING CYLINDERS DURAN A CC MAIN POINT RING GRADUATION GLASS STOPPER BLUE GRADUATION
240 01 xx*	MEASURING CYLINDERS LOW FORM B SHORT LINE AMBER STAIN GRADUATION
264 01 xx*	VOLUMETRIC FLASK A CC AMBER GLASS POLY STOPPER
264 02 xx*	VOLUMETRIC FLASK A CC AMBER GLASS GLASS STOPPER
280 01 xx*	VOLUMETRIC FLASK A CC WITH RIM BLUE GRADUATION
282 01 xx*	VOLUMETRIC FLASK A CC POLY STOPPER BLUE GRADUATION
282 02 xx*	VOLUMETRIC FLASK A CC GLASS STOPPER BLUE GRADUATION
282 03 xx*	VOLUMETRIC FLASK A CC WITHOUT STOPPER BLUE GRADUATION
282 21 xx*	VOLUMETRIC FLASK A CC POLY STOPPER BROWN GRADUATION
295 01 xx*	VOLUMETRIC FLASK A CC PREPACKING REGULATIONS BLUE GRADUATION
296 01 xx*	VOLUMETRIC FLASK A CC CONICAL FORM POLY STOPPER BLUE GRADUATION
296 02 xx*	VOLUMETRIC FLASK A CC CONICAL FORM GLASS STOPPER BLUE GRADUATION
297 01 xx*	VOLUMETRIC FLASK CC ACCORDING TO KOHLRAUSCH
224 01 xx 27*	MEASURING CYLINDER A USP MAIN POINT RING GRADUATION BLUE GRADUATION
264 01 xx 27*	VOLUMETRIC FLASK A USP AMBER GLASS POLY STOPPER

282 01 xx 27*	VOLUMETRIC FLASK A USP POLY STOPPER BLUE GRADUATION
307 12 xx*	BURET WITH STEM B DURAN BLUE GRADUATION
310 01 xx*	BURETTES B CLEAR GLASS STRAIGHT GLASS STOPCOCK WITH GLASS KEY
310 02 xx*	BURETTES B CLEAR GLASS STRAIGHT VALVE STOPCOCK WITH PTFE SPINDLE
311 01 xx*	BURETTES B SB STRAIGHT STOPCOCK WITH GLASS KEY
311 02 xx*	BURETTES B SB STRAIGHT VALVE STOPCOCK WITH PTFE SPINDLE
312 01 xx*	BURETTES B AMBER GLASS STRAIGHT STOPCOCK WITH GLASS KEY WHITE GRADUATION
313 01 xx*	BURETTES AS CC STRAIGHT STOPCOCK WITH GLASS KEY BLACK GRADUATION
314 01 xx*	BURETTES AS CC SB STRAIGHT GLASS STOPCOCK WITH GLASS KEY BLUE GRADUATION
314 02 xx*	BURETTES AS CC SB STRAIGHT VALVE STOPCOCK WITH PTFE SPINDLE BLUE GRADUATION
314 03 xx*	BURETTES AS CC SB STRAIGHT STOPCOCK WITH PTFE KEY
315 01 xx*	BURETTES AS AMBER GLASS CC STRAIGHT STOPCOCK WITH GLASS KEY
315 02 xx*	BURETTES AS AMBER GLASS CC STRAIGHT VALVE STOPCOCK PTFE SPINDLE
321 01 xx*	BURETTES B SB LATERAL STOPCOCK WITH GLASS KEY
321 03 xx*	BURETTES B SB LATERAL VALVE STOPCOCK PTFE SPINDLE
322 01 xx*	BURETTES B AMBER GLASS LATERAL STOPCOCK WITH GLASS KEY
324 01 xx*	BURETTES AS SB CC LATERAL STOPCOCK WITH GLASS KEY
324 03 xx*	BURETTES AS SB CC LATERAL STOPCOCK PTFE SPINDLE
330 01 xx*	BANG BURETTES CC SB STRAIGHT STOPCOCK
330 02 xx*	BANG BURETTES CC SB STRAIGHT STOPCOCK PTFE KEY
331 01 xx*	BANG BURETTES CC SB LATERAL STOPCOCK GLASS KEY
331 03 xx*	BANG BURETTES CC SB LATERAL STOPCOCK PTFE SPINDLE PTFE KEY
333 01 xx*	DAFERT BURETTE THREE-WAY STOPCOCK WITH GLASS KEY
341 01 xx 60*	PELLET SB WITHOUT INTERMEDIATE STOPCOCK B WITHOUT BOTTLE
341 03 xx 60*	PELLET SB WITHOUT INTERMEDIATE STOPCOCK B LATERAL STOPCOCK WITH PTFE SPINDLE WITHOUT BOTTLE
342 01 xx 60*	PELLET B AMBER GLASS WITHOUT INTERMEDIATE STOPCOCK LATERAL GLASS STOPCOCK WITHOUT BOTTLE
342 03 xx 60*	PELLET B AMBER GLASS WITHOUT INTERMEDIATE STOPCOCK LATERAL STOPCOCK WITH PTFE SPINDLE WITHOUT BOTTLE
344 01 xx 60*	PELLET AS CC WITHOUT INTERMEDIATE STOPCOCK SB LATERAL GLASS STOPCOCK WITHOUT BOTTLE
344 03 xx 60*	PELLET AS CC WITHOUT INTERMEDIATE STOPCOCK SB LATERAL STOPCOCK WITH PTFE SPINDLE WITHOUT BOTTLE
352 01 xx 60*	PELLET B AMBER GLASS LATERAL GLASS STOPCOCK WITH INTERMEDIATE STOPCOCK WITHOUT BOTTLE
352 03 xx 60*	PELLET B AMBER GLASS LATERAL STOPCOCK WITH SPINDLE PTFE WITH INTERMEDIATE STOPCOCK WITHOUT BOTTLE
354 01 xx 60*	PELLET AS CC SB LATERAL GLASS STOPCOCK WITH INTERMEDIATE STOPCOCK WITHOUT BOTTLE
354 03 xx 60*	PELLET AS CC SPINDLE PTFE WITH INTERMEDIATE STOPCOCK SB WITHOUT BOTTLE
355 03 xx 60*	PELLET AS AMBER GLASS SPINDLE PTFE WITH INTERMEDIATE STOPCOCK CC WITHOUT BOTTLE
360 01 xx*	AUTOMATIC BURETTE DR. SCHILLING BLUE GRADUATION

640 01 xx*	TEST TUBES DURAN BLUE GRADUATION
642 01 xx*	TEST TUBES DURAN BLUE GRADUATION WITH NS GROUND AND POLY STOPPER
700 01 xx*	ERLENMEYER FLASK DURAN NARROW NECK WITH RIM
702 01 xx*	ERLENMEYER FLASK DURAN NARROW NECK WITH NS GROUND
710 01 xx*	ERLENMEYER FLASK DURAN WIDE NECK WITH RIM
712 01 xx*	ERLENMEYER FLASK DURAN WIDE NECK WITH NS GROUND
720 01 xx*	BEAKER LOW FORM DURAN WITH GRADUATION AND SPOUT
721 01 xx*	BEAKER TALL FORM DURAN WITH GRADUATION AND SPOUT
727 01 xx*	BEAKER LOW FORM DURAN SUPER DUTY WITH GRADUATION AND SPOUT
722 01 xx*	LABORATORY BOTTLE DURAN PP SCREW CAP
725 01 xx*	LABORATORY BOTTLE DURAN AMBER GLASS PP SCREW CAP
723 01 xx*	SQUARE BOTTLE DURAN PP SCREW CAP
724 01 xx*	GLASS BOTTLE DURAN GLS 80 WIDE NECK
726 01 xx*	GLASS BOTTLE DURAN AMBER GLASS GLS 80 WIDE NECK
890 08 xx*	STRAIGHT BURETTE STOPCOCK WITH GLASS KEY DURAN
890 10 xx*	STRAIGHT VALVE STOPCOCK PTFE SPINDLE DURAN
890 11 xx*	LATERAL BURETTE STOPCOCK WITH GLASS KEY DURAN
890 14 xx*	LATERAL VALVE STOPCOCK PTFE SPINDLE DURAN
900 01 xx*	MINICAPS END-TO-END CC DURAN
900 02 xx*	MINICAPS END-TO-END CC DURAN SODIUM HEPARINIZED
905 02 xx 01*	OPEN END CAPILLARIES CC DURAN SODIUM HEPARINIZED
920 10 xx*	CAPILLARY TUBES BOTH ENDS OPEN
921 10 xx*	MELTING POINT DETERMINATION TUBES ONE END CLOSED
955 05 32	RINGCAPS FOR REFLOTRON LITHIUM HEPARINIZED
924 01 96	96ER HIRSCHMANN PLATE NORMWELL FIXED INSERTS
924 11 96	96ER HIRSCHMANN PLATE DEEPWELL LOOSELY INSERTED
924 01 84	384ER HIRSCHMANN PLATE NORMWELL FIXED INSERTS
924 11 84	384ER HIRSCHMANN PLATE DEEPWELL LOOSELY INSERTED
924 05 84	GLASS INSERTS FOR HIRSCHMANN PLATES FOR 384ER PLATE
924 01 36	1536ER HIRSCHMANN PLATE NORMWELL FIXED INSERTS
924 21 96	96ER HIRSCHMANN PLATE ALUMINUM WITHOUT INSERTS
924 21 84	384ER HIRSCHMANN PLATE ALUMINUM WITHOUT INSERTS
924 05 96	GLASS INSERTS FOR HIRSCHMANN PLATES FOR 96ER PLATE

Appendix 1 * applies to all variants