

BRILLIANT PEEL®



non-toxic

ready-to-use solution

CE-marked

- **NEW!** More precise and intense staining of the ILM due to increased density
- Only CE-marked ILM dye
- Safe and quick application under air or liquid
- No additional filter required
- Stable concentration



Comparison of the dyes Brilliant Blue G (BBG), Indocyanine Green (ICG) and Trypan Blue (TB) for chromovitrectomy

	BBG	ICG	TB	Composition and Properties of BRILLIANT PEEL®
Chemical group	Triphenylmethane	Cyanine	Diazo	Composition in one 0.5 syringe / vial 0.125 mg – Brilliant Blue G 0.065 ml – D ₂ O 0.95 mg – Na ₂ HPO ₄ x 2 H ₂ O 0.15 mg – NaH ₂ PO ₄ x 2 H ₂ O 4.1 mg – NaCl ad 0.5 ml water for injection purposes Concentration: 0.25 g/l pH-value: 7.52 Osmolality: 306 mOsm/kg H ₂ O Maximum absorption: 584.0 nm Density: 1.017 - 1.019 g/cm ³
Color	blue	dark green	dark blue	
Ready-to-use	yes	no	yes	
Toxicity ^{1, 3, 10}	no	yes	slightly	
Registration	yes	no	yes	
Affinity to ILM ⁴	high	high	low	
Affinity to ERM	low	low	high	
Selective Staining of ILM ⁴	strong	strong	low	
Exposure time	short	short	long	
Fluid / gas exchange required	no	no	yes	

Cytotoxicity in accordance with DIN EN ISO 10993 and ILM-staining ability¹⁰

Dye	Significant cytotoxic effect	ILM-Staining
Brilliant Blue G	> 0.3 g / L Cytotoxic effect: causes cell growth inhibition	strong
Indocyanine Green	> 0.24 g / L Cytotoxic effect: causes apoptosis	strong
Trypan Blue	> 0.13 g / L	low

LITERATURE 1 Lüke C, et al.: Retinal tolerance to dyes, Br J Ophthalmol, 2005, 89, 1188-1191 2 Haritoglou C, et al.: Färbetechniken in der Makulachirurgie, Ophthalmologie, 2006, 103, 927-934 3 Ueno A, et al.: Biocompatibility of Brilliant Blue G in a rat model of subretinal injection, Retina, 2007, 27, 499-504 4 Enaida H, et al.: Brilliant Blue G selectively stains the internal limiting membrane – Brilliant Blue G assisted membrane peeling, Retina, 2006, 26, 631 – 636 5 Enaida H, et al.: Preclinical investigation of internal limiting membrane staining and peeling using intravitreal Brilliant Blue G, Retina, 2006, 26, 623-630 6 Hisatomi T, et al.: Staining ability and biocompatibility of Brilliant Blue G – preclinical study of Brilliant Blue G as an adjunct for capsular staining, Arch Ophthalmol, 2006, 124, 514-519 7 Goldman JM, et al.: Adjunct devices for managing challenging cases in cataract surgery – capsular staining and ophthalmic viscosurgical devices, Curr Opin Ophthalmol, 2007, 18, 52-57 8 Meyer CH, et al.: Historical considerations in applying vital dyes in vitreoretinal surgery: from early experiments to advanced chromovitrectomy, Expert Rev. Ophthalmol., 2007, 71-77 9 Rodrigues EB, et al.: Vital dyes for chromovitrectomy, Curr Opin Ophthalmol, 2007, 18, 179-187 10 Hiebl W, et al.: Substances for staining biological tissues: use of dyes in ophthalmology, Klin Monatsbl Augenh, 2005, 222, 309-311 11 Kawahara S, et al.: Intracellular events in retinal glial cells exposed to ICG and BBG, IOVS, 2007, Vol. 48, No. 10