Physical properties of ZEISS immersion oils

further information can be found in the Technical Data Sheet in SAP P10.

	Immersol® 518 N	Immersol® 518 F	Immersol® M	Immersol® HI 1,66	Immersol® 2010 W	Immersol® G
Material number	**424.187**	**360.890**	**488.362**	**516.158**	**522.046**	**531.910**
Area of application	Standard oil for microscopy, corresponds to ISO 8036 (DIN 58.884). Also suitable for open preparations (no cover glasses) with objective lens **Achroplan 100 x / 1.25 oil o.D.**	Fluorescence microscopy, optimized dispersion, corresponds to ISO 8036 (DIN 58.884). Also suitable for open preparations (no cover glasses) with objective lens **Achroplan 100 x / 1.25 oil o.D.**	Immersion oil for metallography, corresponds to ISO 8036 (DIN 58.884).	Highly-refractive immersion fluid for high-resolution microscopy. Suitable in combination with cover glasses from NSSK2. **Alpha-Plan-Apochromat 100x1.57**	Immersion oil for water immersion, not suitable for open preparations (without cover glasses), will dissolve dyes.	Immersion glycerin
Chemical basis	Ester oils, synthetic hydrocarbons, **halogen-free**	Ester oils, **halogen-free**	Alcohols, glycols, ester, **halogen-free**	Aryl thioester, **halogen-free**	Urethane-modified alcohol-terminated perfluorinated polyether	Alcohol
Refractive indices n (23°C)						
at 546.1 nm (e)	**1.5180**	**1.5180**	**1.5180**	**1.6610**	**1.3339**	**1.4560**
at 589.3 nm (D)	1.5150	1.5151	1.5151	1.6539	1.3329	1.4541
Dispersion ν_e (23 °C)	42.1	45.8	45.8	21.6	82.2	58.5
Permeability (d=10 mm)						
450 nm				93		99 (320 nm)
420 nm	95	99		76		90 (300 nm)
400 nm	92	98		42		80 (270 nm)
380 nm	88	96	98	10	97	70 (240 nm)
365 nm	82	94	95		95	
350 nm	70	88	90		92	
Inherent fluorescence [mg/l] Quinine sulfate equivalent amount						
F (365 nm / 450 nm)	max. 0.30	max. 0.05	max. 0.20		max. 0.20	max. 0.02
F (405 nm / 485 nm) (F-excitation/ F-emission)	max. 10	max. 1.0	max. 5.0	max. 8.0	max. 8.0	max. 0.5

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Other auxiliary materials

Product description	Casting resin CY filled (62 %), mixed	Casting resin CY-LV filled, mixed	Special casting resin mixed	Antistatic pouring compound	Dust binding solution SBL 2010
Material number	**106.428**	**106.427**	**360.722**	**488.622**	**519.408**
Chemical basis	Epoxy resin, anhydride hardener, quartz	Epoxy resin, anhydride hardener, quartz	Epoxy resin, anhydride hardener	Epoxy resin, amine hardener	Synthetic hydrocarbons, fillers, petroleum ether (solvent), dye
Useful temperature range	-40 / 120	-40 / 120	-40 / 120	-40 / 80	-25 / 100
Application characteristics	Production of molded parts and high-voltage insulators.	Molded parts with high insulation and low expansion coefficient.	Used by LEO. Unfilled casting resin with lower volume shrinkage (approx. 1.9 percent by volume).	Antistatic pouring compound	Viscous variant of dust binding solution SBL 2010. Solvent-containing adhesive agent dispersion, leaves a black, sticky film after solvent evaporation which binds small particles and dust within the housings of optical instruments by adhesion; fungicides.
Ordering information	Casting resin CY filled (62 %), mixed Mat. no. 106.428	Casting resin CY filled, mixed Mat. no. 106.427	Casting resin special, mixed Mat. no. 360.722	Antistatic pouring compound Mat. no. 488.622	Dust binding solution SBL 2010 Mat. no. 519.408

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