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ALF3-SiO2 FLUORIDE SILICATE MC20 MILK GLASS OPTICAL GRADE

GLASS ATTRIBUTES:

		<u>Lambda, nm</u>	
Formula	fluoride silicate		AlF3-SiO2
System	bi-phase		glass & crystal
Crystal phase	vol %		more 95
SiO ₂	wt %		47.53
AlF ₃	wt %		11.38
P ₂ O ₅	wt %		4.54
Fe, Co, Ni, Cr, Cu			none
Colour	nonspecular		milk
Catalogue thickness	mm		7
Reflectance	av. %	VIS-Band	4
Reflectance (diffusion)	av. %	VIS-Band	96

OPTIC ATTRIBUTES:

		<u>Lambda, nm</u>		
Index	n _{589.3}	589.3		1.520
Reflectance (diffusion)	r ₄₀₀	400		≥0.935
	r ₄₄₀	440		≥0.945
	r ₄₈₀	480		≥0.960
	r ₅₂₀	520		≥0.970
	r ₅₆₀	560		≥0.970
	r ₆₀₀	600		≥0.970
	r ₆₄₀	640		≥0.965
	r ₇₂₀	720		≥0.965

MECHANIC ATTRIBUTES:

Specific gravity	g/cm ³		2.80
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THERMIC ATTRIBUTES:

Transformation temperature(Tg)	°C		520
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CHEMIC ATTRIBUTES:

Climatic resistance	Gost Standard Method		standard
Acid resistance	Gost Standard Method		standard

OTHER ATTRIBUTES:

Workmanship (ST): standard grade 3

Normal inclusions - homogeneities	micron		1.0
Abnormal inclusions is major 8 at 1dm ²	mm		1.0

Workmanship (SE): extra standard grade 2

Abnormal inclusions is minor 8 at 1dm ²	mm		1.0
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Workmanship (PZ): precision grade 1

Abnormal inclusions is minor 8 at 1dm ²	mm		0.2
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RESUME:

The special glass due to the high-diffusional reflection is optical standard for 100% super white-color. The glass specification is Ukrainian Optical Industrial Standard 32494-85.

The glass is typified as follows MC20 glass.