SIBELCO **SILVEF**

SILVERBOND® crystalline silica is produced from high purity quartz feed stock for manufacturing and f
of applications which require structurally sound, chemically pure or non-reactive fine mineral fillers.
Completely inert and pH neutral, SILVERBOND® will not alter or initiate when incorporated in catalyse
chemical systems, and will not degrade when employed in extreme temperatures or harsh
environments. SILVERBOND offers formulators a low surface area, minimal oil absorption option to ac
loading in coatings and cementitious systems and stiffening in elastomeric and high performance epo
Chemically pure SILVERBOND also serves as an excellent nonconductor in electrical assemblies and pc
compounds, and non-combustible filler in thermal insulating.
All SILVERBOND® grades are processed with adherence to ISO and internal quality assurance program
The result is chemical purity and consistently uniform particle size distributions for predictable results
reliable services.

GRANULOMETRIC DATA AND PHYSICAL CHARACTERISTICS

SILVERBOND:		**M4**	**M6**	**M8**	**M10**
CHARACTERISTICS					
Control sieve	**> 100µm**	16			
	>63µm		14	5,5	2
D10		7	5	4	4
D50		50	30	27	23
D90		170	95	75	60
Density		2,65	2,65	2,65	2,65
Bulk density		1,15	1	0,9	0,9
Specific surface		1950	2450	3200	3600
Oil absorption		14,5	16,5	17	17,5
Hardness		7	7	7	7
Ph		7	7	7	7
Loss on ignition		0,15	0,15	0,15	0,15
Colour	**L***	89,5	89,6	91,8	92
	a*	1,1	0,87	0,9	0,8
	b*	3,8	3,7	3,3	3,3
Refractive index		1,55	1,55	1,55	1,55

CHEMICAL ANALYSIS (XRF) %	
SiO_2	**99,4**
Fe_2O_3	**0,03**
Al_2O_3	**0,10**
TiO_2	**0,07**

GRANULOMETRIC DATA AND PHYSICAL CHARACTERISTICS

SILVERBOND:	**M6**	**M10**	**M300**	**M400**

CHARACTERISTICS					
Control sieve	**> 63µm**	14	2		
	> 40µm			1,8	0,1
	5µm				
D10		5	4	3	3
D50		30	23	17	12
D90		95	60	40	26
Density		2,65	2,65	2,65	2,65
Bulk density		1	0,9	0,85	0,7
Specific surface		2450	3600	4000	6500
		0,8	0,9	0,9	1,9
Oil absorption		16,5	17,5	19	20
Hardness		7	7	7	7
Ph		7	7	7	7
Loss on ignition		0,12	0,12	0,12	0,12
Colour	**L***	90	91	92	93
	a*	0,87	0,74	0,62	0,55
	b*	4,13	3,57	3,09	3,00
Refractive index		1,55	1,55	1,55	1,55

CHEMICAL ANALYSIS (XRF) %				
CHARACTERISTICS	**M6**	**M10**	**M300**	**M400**
SiO_2	99,5	99,5	99,5	99,5
Fe_2O_3	0,03	0,03	0,03	0,03
Al_2O_3	0,20	0,20	0,20	0,20
TiO_2	0,03	0,03	0,03	0,03
K_2O	0,04	0,04	0,05	0,05
CaO	0,02	0,02	0,02	0,02

SILICA SAND OF MOL M31 - M32 - M34

After mining, the silica sands of Mol - M31, M32 and M34 - are industrially processed: sieved, washed and classified. These qualities are available moist or dried; by truck, wagon or ship; in bulk or bagged (dried sands).
The silica sands of Mol are an excellent raw material for the glass-, crystal- and ceramic industry, for foundries, for tile glues, plasters, mortars, coatings etc…

GRANULOMETRIC DATA AND PHYSICAL CHARACTERISTICS

		M31	**M32**	**M34**	
CHARACTERISTICS					**UM**
D50		370	260	170	µm
AFS		45	50	75	
> 1000µm		1			%
> 710µm		5			%
> 500µm		25			%

> 355µm		53	7		%	
> 250µm		85	57	3	%	
> 180µm		98	93	30	%	
> 125µm				91	%	
< 63µm		traces	≤ 0,1	≤ 0,3	%	
Density		2,65	2,65	2,65	kg/dm³	
Bulk density		1,6	1,5	1,4	kg/dm³	
Hardness		7	7	7	Mohs	
Ph		7	7	7		
Loss on ignition		0,15	0,15	0,15	%	
Colour	**L***	70	70	72		Minolta CM-36
	a*	2,63	2,79	1,93		D65/10°
	b*	9,58	9,82	7,76		

CHEMICAL ANALYSIS (XRF) %			
CHARACTERISTICS	**M31**	**M32**	**M34**
SiO_2	99,5	99,5	99,0
Fe_2O_3	0,04	0,03	0,07
Al_2O_3	0,20	0,20	0,60
TiO_2	0,03	0,03	0,06
K_2O	0,03	0,05	0,30
CaO	0,01	0,01	0,02

RBOND - Technical Data Sheets

formulation

ed or multicomponent

chieve high
oxy.
otting

is.
s supported by

	U.M.	METHOD
	%	Alpine
	%	Alpine
	µm	Malvern MS2000
	µm	Malvern MS2000
	µm	Malvern MS2000
	kg/dm³	
	kg/dm³	
	cm²/g	Blaine
	g/100g	
	Mohs	
	%	
		Minolta CM-3610d D65/10°

M500	M600	M800

			U.M.	METHOD
			%	Alpine
0,012	0,04		%	Alpine
		95	% passing	Malvern MS2000
2	2	0,6	µm	Malvern MS2000
4	4	1,8	µm	Malvern MS2000
10	9	4,1	µm	Malvern MS2000
2,65	2,65	2,65	kg/dm³	
0,65	0,6	0,4	kg/dm³	
12000	13000	21500	cm²/g	Blaine
4,2	4,2	7,8	m²/g	BET
23	24	32	g/100g	
7	7	7	Mohs	
7	7	7		
0,3	0,3	0,3	%	
94	94	96		Minolta CM-3610d
0,46	0,46	0,4		D65/10°
2,78	2,78	0,8		
1,55	1,55	1,55		

M500	**M600**	**M800**
99,2	99,2	99,0
0,05	0,05	0,01
0,40	0,40	0,80
0,03	0,03	0,03
0,05	0,05	0,05
0,02	0,02	0,02

510