



**PT. TIRTA BENING MULIA**  
Industri Kaca Alkali Silikat (Water Glass)

## SODIUM SILICATE

Parameter	Unit	Be 40 R3	Be 42 R3	Be 42 R2.1	Be 42 R2.3	Be 44	Be 46	Be 50	Be 51	Be 52	Be 58
Na <sub>2</sub> O Content	% w/w	7.90 - 8.40	Approx. 9.0	11.85 - 12.55	11.25 - 11.75	11.75 - 12.40	11.75 - 12.80	12.80 - 14.30	13.90 - 14.60	14.15 - 15.00	15.75 - 16.75
SiO <sub>2</sub> Content	% w/w	26.90 - 28.50	Approx. 29.5	24.30 - 28.00	26.00 - 27.00	27.50 - 28.50	28.70 - 30.40	29.40 - 32.90	32.50 - 33.20	32.70 - 34.10	36.20 - 38.60
Ratio	SiO <sub>2</sub> /Na <sub>2</sub> O	3.20 - 3.50	3.20 - 3.29	2.00 - 2.10	2.25 - 2.35	2.25 - 2.35	2.30 - 2.50	2.25 - 2.35	2.25 - 2.35	2.25 - 2.35	2.25 - 2.35
Specific Gravity at 27°C	g/ml	Approx. 1.370	Approx. 1.41	1.4078 - 1.4356	1.4078 - 1.4216	1.4356 - 1.4500	1.4646 - 1.4796	1.4900 - 1.5500	1.5426 - 1.5591	1.5591 - 1.5761	1.6478 - 1.6860
Baume at 27°C	°Baume	Approx. 39.16	Approx. 42.16	42.00 - 44.00	42.00 - 43.00	44.00 - 45.00	46.00 - 47.00	47.68 - 51.45	51.00 - 52.00	52.00 - 53.00	57.00 - 59.00

## POTASSIUM SILICATE

Parameter	Unit	Specification
K <sub>2</sub> O Content	% w/w	12 - 13
SiO <sub>2</sub> Content	% w/w	26 - 27
Ratio	SiO <sub>2</sub> /K <sub>2</sub> O	2.04 - 2.17
Specific Gravity at 20°C	g/cm <sup>3</sup>	1.36 - 1.38
Baume at 20°C	°Be	38.38 - 39.93
Viscosity at 25°C	cPs	550 - 800

## MIXED SILICATE

Parameter	Unit	Specification
Na <sub>2</sub> O Content	% w/w	6.20 - 7.50
K <sub>2</sub> O Content	% w/w	3.80 - 4.50
SiO <sub>2</sub> Content	% w/w	27 - 30
Specific Gravity at 20 °C	g/cm <sup>3</sup>	Min 1.41
Baume at 20 °C	°Be	Min 42.16
Viscosity at 25 °C	cPs	90 - 140

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