

## **1. SPECIFICATIONS OF FOUNDRY GRADE BENTONITE POWDER**

<b>PARAMETERS</b>	<b>REGULAR GEL</b>	<b>INSTANT GEL</b>	<b>SUPER INSTANT GEL</b>	<b>ULTRABOND SPL</b>	<b>ULTRABOND SUPER</b>
Moisture (at 105 C oven method)	10 – 12%	10 – 12%	10-12%	10-12%	10 – 12.5%
Swelling Capacity (at 2 gm dried Bentonite in 100 CC distilled H <sub>2</sub> O)	22 – 24 CC	25 – 27 CC	30 – 32 CC	35 – 40 CC	40 – 46 CC
Gelling time (at 2 gm dried Bentonite in 20 CC distilled H <sub>2</sub> O)	<b>INSTANTANEOUS</b>	<b>INSTANTANEOUS</b>	<b>INSTANTANEOUS</b> Less than 35 sec	<b>INSTANTANEOUS</b> Less than 20 sec.	<b>INSTANTANEOUS</b> Less than 15 sec.
Gel Index (with 2.6 gms Al <sub>2</sub> O <sub>3</sub> + 0.2 gms MgO + 1.4 gm dried Bentonite Powder)	50 – 55 CC	60 – 65 CC	80 – 85 CC	85 – 95 CC	90 – 98 CC
Green Compressions Strength (at 7% Bentonite and 3% distilled H <sub>2</sub> O)	10.5 – 11 PSI	10.5 – 12.5 PSI	12.5 – 14 PSI	14 – 15.5 PSI	14 – 17 PSI
Methylene Blue Absorption in Mgs/bm	360 - 380	380 - 400	425 - 450	450 - 475	475 - 490
Liquid Limit with 20 gms dried Bentonite	400 – 450	500 - 550	600 - 650	700 - 750	750 - 950
Mesh size passing through IS 200 mesh	88 – 90%	88 – 90%	88 – 90%	88 – 90%	88 – 90%
PH at 2% slurry	8.00	8.5 - 9	9 – 9.5	9.5 - 10	10 – 10.5