



**Joint-Stock Company
Borovichi Refractories
(Proppant) Plant**

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BORPROP[®]

Technical Data Sheet

Ceramic proppant

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Physical Properties

| | | | | |
|----------------------|------|-------|-------|-------|
| Closure Stress (psi) | 7500 | 10000 | 12500 | 15000 |
| CRUSH RESISTANCE | 7.9% | 11.8% | 14.3% | 20.5% |

| | | | | | | |
|--------------------|--------|---------|---------|---------|---------|---------|
| | -8 +12 | -12 +14 | -14 +16 | -16 +18 | -18 +20 | -20 +30 |
| SIEVE DISTRIBUTION | 0.0% | 0.2% | 36.0% | 63.3% | 0.5% | 0.0% |

| | |
|------------------------------|-------|
| Bulk Density, g/ccm: | 1.73 |
| Specific Gravity, g/ccm: | 3.10 |
| Sphericity: | 0.9 |
| Roundness: | 0.8 |
| Mean Size, mm: | 1.162 |
| Acid Solubility, % (by ISO): | 5.6 |
| Turbidity, FTU: | 60 |

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Long-Term Conductivity and Permeability

| | | | | | | |
|----------------------|-------|-------|-------|------|-------|-------|
| Closure Stress (psi) | 2000 | 4000 | 6000 | 8000 | 10000 | 12000 |
| Conductivity, Md-Ft | 25642 | 17962 | 10125 | 5552 | 2910 | 2038 |
| Permeability, Darcy | 1408 | 1025 | 603 | 345 | 188 | 137 |