

US Ceramics ProLite®

US - Manufactured product Economy lightweight proppant

ECONOMY

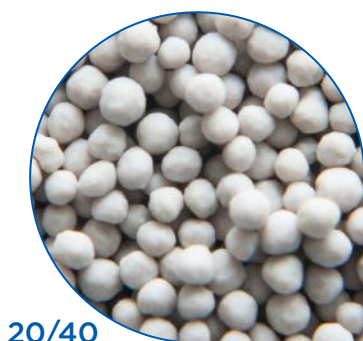
A true kaolin lightweight ceramic proppant.

AMERICAN-MADE

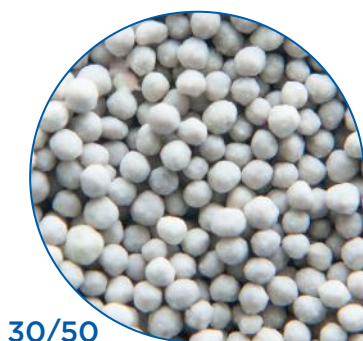
Made from local materials in the U.S.A.

INNOVATIVE

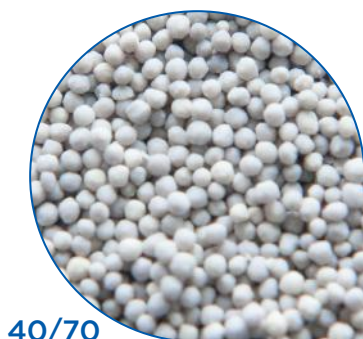
Available in three mesh sizes 20/40, 30/50, 40/70.



20/40



30/50



40/70

Typical Sieve Analysis *(weight % retained)*

US Mesh	Microns	ProLite® 20/40	ProLite® 30/50	ProLite® 40/70
-16+20 mesh	-1,200+840	2.2	0.1	
-20+30 mesh	-840+600	74.5	4.7	
-30+40 mesh	-600+420	21.8	88.4	0.4
-40+50 mesh	-420+300	1.5	6.9	93.7
-50+70 mesh	-300+210			5.9
-70 mesh	-210			0.1

Median Particle Diameter (µm)	669	510	350
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API/ISO Crush Test % by weight fines generated	10,000 psi	≤9.0	≤6.0	≤5.0
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Typical Additional Properties of US Ceramics ProLite®

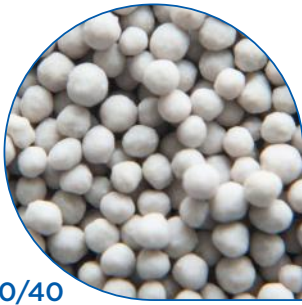
Roundness	≥0.8	≥0.8	≥0.8
Sphericity	≥0.8	≥0.8	≥0.8
Bulk Density (lb/ft ³)	95 ± 5	95 ± 5	95 ± 5
Absolute Specific Gravity	2.70 ± 0.05	2.70 ± 0.05	2.65 ± 0.05
Absolute Specific Volume (gal/lb)	0.044	0.044	0.045
Solubility in 12/3 HCl/HF Acid (% weight loss)	≤3	≤3	≤3

*Superior Performance
You Can Trust For
Your Unconventional
Challenges*

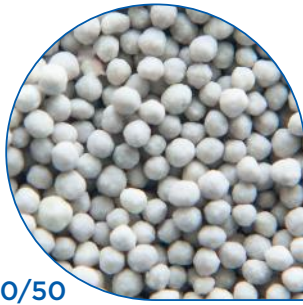


PERFORMANCE of US Ceramics ProLite®

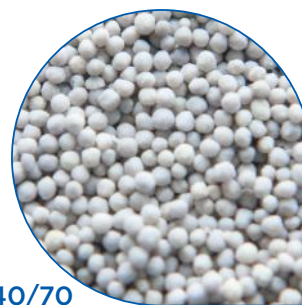
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20/40



30/50

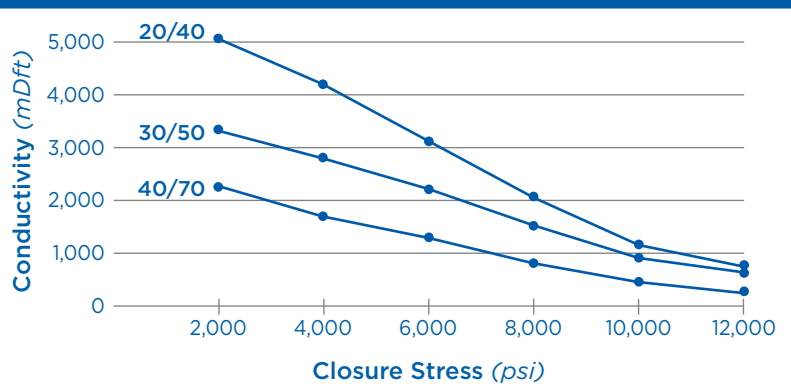


40/70

Long Term Conductivity*

2lb/ft² - 250°F - 2% KCL Water - Ohio Sandstone

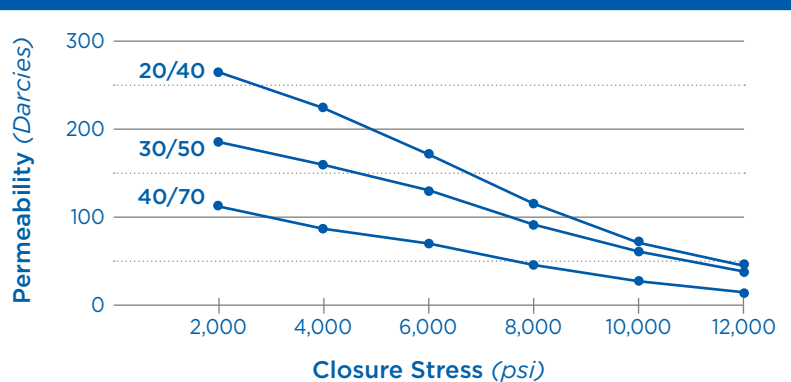
Closure Stress (psi)	ProLite® 20/40	ProLite® 30/50	ProLite® 40/70
2,000	5,109	3,351	2,282
4,000	4,185	2,816	1,692
6,000	3,157	2,241	1,315
8,000	2,026	1,528	837
10,000	1,184	939	448
12,000	767	649	246



Long Term Permeability*

2lb/ft² - 250°F - 2% KCL Water - Ohio Sandstone

Closure Stress (psi)	ProLite® 20/40	ProLite® 30/50	ProLite® 40/70
2,000	261	183	110
4,000	219	158	85
6,000	169	128	67
8,000	113	90	44
10,000	69	57	24
12,000	43	41	14



* Conductivity and Permeability testing completed per API RP 19D / ISO 13503-5 specification. All data measured by third party industry independent test laboratory in 2012/2013.



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