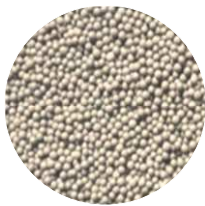


## 1. PRODUCT FEATURES

- **LIGHTWEIGHT CERAMIC** MICROSPHERES SUITABLE FOR USE AS HYDRAULIC PROPPING AGENT (PROPPANT)
- **MODERATE** STRENGTH
- **CHEMICALLY** INERT
- **UNIFORMITY** IN SHAPE AND SIZE
- **BEST CHOICE** FOR A WIDE RANGE OF APPLICATIONS, ESPECIALLY FOR MODERATE DEPTH WELLS
- **ECONOMIC** PRICE
- **AVAILABLE SIZES:** 16/30, 20/40, 30/50 AND 40/70

## 2. PHYSICAL AND CHEMICAL PROPERTIES

Chemical analysis		Particle size distributions					
		US Mesh	Microns	16/30	20/40	30/50	40/70
% Al <sub>2</sub> O <sub>3</sub> .....	62 - 64	+16 mesh	1180 µm	1% - 5%			
% SiO <sub>2</sub> .....	22 - 24	-16+20 mesh	850 µm	80% - 89%	3% - 8%		
% Fe <sub>2</sub> O <sub>3</sub> .....	7 - 8	-20+30 mesh	600 µm	10% - 15%	62% - 87%	4% - 6%	
% TiO <sub>2</sub> .....	2 - 4	-30+40 mesh	425 µm		10% - 30%	69% - 76%	47% - 51%
% Otros.....	3 - 7	-40+50 mesh	300 µm			20% - 25%	
		-50+70 mesh	212 µm				47% - 51%
		-70 mesh	< 212 µm				< 5%
		Median particle size, µm		930 - 970	660 - 720	470 - 500	380 - 430



**Proppant L 16/30**



**Proppant L 20/40**



**Proppant L 30/50**



**Proppant L 40/70**

Physical properties				
Roundness (Krumbein & Sloss).....	0.9	Crush resistance test:		
Sphericity (Krumbein & Sloss).....	0.9	psi	MPa	% fines generated
Bulk density.....	1.65 - 1.70 g/cm <sup>3</sup>	7,500	52	< 7%
	103 - 106 lb/ft <sup>3</sup>			
Apparent specific gravity.....	2.85 - 3.00			
Solubility in 12/3 HCl/HF acid.....	< 7%			

## 4. PACKAGING AND DELIVERY

Ceramic proppants L are supplied in the following formats:

- In bulk.
- In big - bags of 1,000 kg.

### ARCIRESA Factory:

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