

# SILVAPERL PERLITE P3LW

**CRYOGENIC**

**NON-COMBUSTIBLE ULTRA-LIGHTWEIGHT MINERAL AGGREGATE  
WITH EXCELLENT INSULATION & ADSORPTION PROPERTIES**

## CHEMICAL PROPERTIES

Perlite is an aluminosilicate glass.

### TYPICAL CHEMICAL COMPOSITION:

Silicon as SiO <sub>2</sub>	73%
Aluminium as Al <sub>2</sub> O <sub>3</sub>	15%
Iron as Fe <sub>2</sub> O <sub>3</sub>	2%
Sodium as Na <sub>2</sub> O	3%
Potassium as K <sub>2</sub> O	5%
Calcium as CaO + Magnesium as MgO	1%
Others	1%
Organic Matter	nil
Moisture Content (when packed)	less than 0.8%

### PHYSICAL PROPERTIES:

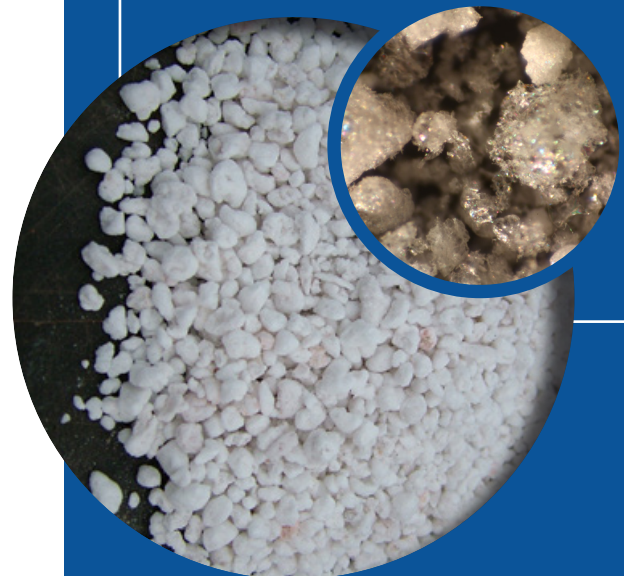
Refractive Index	1.5
Free Moisture (max)	< 0.50%
pH of Water Slurry	6.5 - 7.5
Softening Point	890 – 1100 °C
Fusion Point	1280 – 1350 °C
Specific Heat	837 J kg <sup>-1</sup> K <sup>-1</sup>
Thermal Conductivity (loose poured)	0.05 W m <sup>-1</sup> K <sup>-1</sup>
Bulk Density	35 - 55 kg m <sup>-3</sup>

## TYPICAL GRADING

SIEVE SIZE (MM)	WEIGHT PASSING (%)
1.180	90 - 100
0.600	70 - 90
0.300	35 - 55
0.150	10 - 30
0.075	0 - 10

## APPLICATIONS

- Low temperature cryogenic storage
- Super chill insulation for fractional distillation of gases such as Argon, Nitrogen, Helium and Oxygen
- Processing of Liquefied Natural Gas (LNG)
- Insulation of storage tanks or cold boxes



[www.SILVAPERL.com](http://www.SILVAPERL.com)