



PETRA INDIA GROUP

THE SPHERE TECHNOCRATS


Microlite™

HOLLOW GLASS MICROSPHERES

FOR EXPLOSIVE FORMULATIONS

COMMITTED TO QUALITY
MANUFACTURING SINCE 1999



HIGH-EFFICIENCY FILLERS FOR LOW-DENSITY EXPLOSIVES

In today's mining industry, where operational costs are climbing and commodity prices are under pressure, boosting efficiency while minimizing expenses has become a top priority. Petra Microlite™ Hollow Glass Microspheres offer a smart solution for explosive formulations—acting as highly effective sensitizers that deliver more powerful, predictable, and controlled detonations, helping you move more rock with less effort.

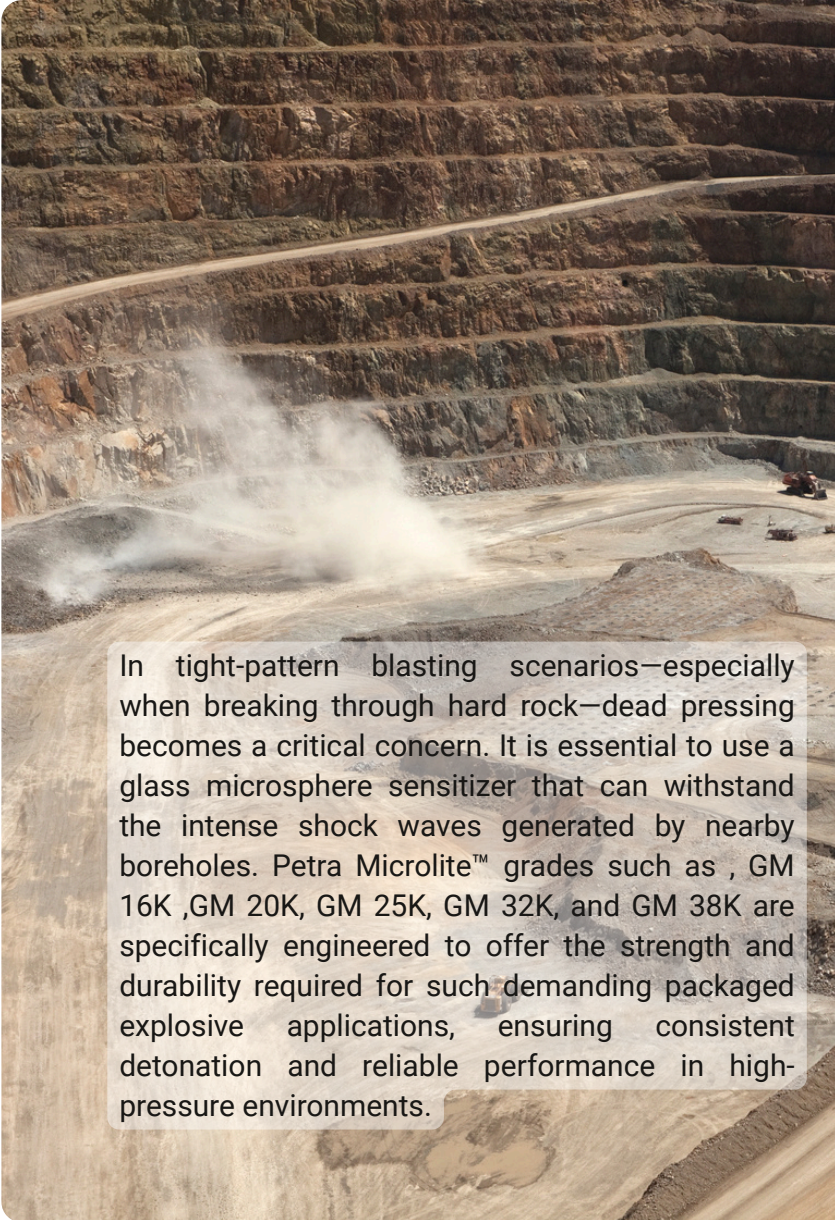
The performance of any explosive charge heavily depends on the quality of its sensitizer. Petra Microlite™ spheres are precision-engineered to serve this role by introducing pre-formed, low-density, spherical voids essential for reliable detonation. The result? Consistently high velocity of detonation (VOD) that enhances fragmentation. With Petra Microlite™ you can achieve:

- Fewer secondary blasts
- Reduced energy usage
- Higher powder factor
- Increased throughput (tons/hour)
- Lower cost per ton of rock excavated.

Petra Microlite™ hollow glass microspheres offer unmatched stability and consistency in explosive formulations. Their strong, pre-formed hollow structure ensures uniform detonation, even under extreme conditions. Easy to blend and evenly distributed, they support longer sleep times without performance loss. With a wide range of densities and strengths, Petra Microlite™ is a reliable sensitizer for bulk emulsions, packaged emulsions, water gels, and slurry explosives—helping you reduce costs while maximizing blast efficiency.

Engineering the Perfect Detonation

Effective detonation in explosives depends on the presence of density discontinuities—commonly known as “hot spots”—which are critical to sustaining the detonation wave and enhancing sensitivity. While various scientific theories explain how hot spots function—ranging from localized temperature rise due to adiabatic compression to energy transmission through plasma jets—they all emphasize the need for hot spots to be uniformly distributed, low in density, small in size, and stable under varying conditions of time, pressure, and temperature. Petra Microlite™ hollow glass microspheres are engineered to meet all these criteria, making them an ideal choice for boosting explosive performance through reliable and efficient sensitization.



In tight-pattern blasting scenarios—especially when breaking through hard rock—dead pressing becomes a critical concern. It is essential to use a glass microsphere sensitizer that can withstand the intense shock waves generated by nearby boreholes. Petra Microlite™ grades such as , GM 16K ,GM 20K, GM 25K, GM 32K, and GM 38K are specifically engineered to offer the strength and durability required for such demanding packaged explosive applications, ensuring consistent detonation and reliable performance in high-pressure environments.



GRADES WE OFFER

PRODUCT	DENSITY	STRENGTH (in PSI)	LOADING % BY WEIGHT (APPROX)
GM 16	0.15	500	1.9-2.1%
GM 20	0.2	500	2.5-3.0%
GM 25	0.25	750	3.3-3.7%
GM 32	0.32	2000	4.5-5.0%
GM 38	0.38	5500	5.7-6.2%

LIGHTER PAYLOAD, STRONGER BLASTS!!



THE SPHERE TECHNOCRATS

☎ : +91070690 02172

✉ : sales@petraindiagroup.com

🌐 : www.indiacenosphere.com

