

Polar Cleanliness and Air Quality

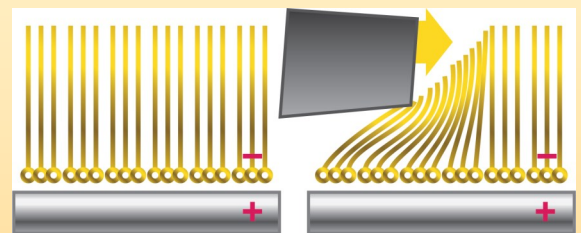


Conventional rock drill oils produce carbon, soot and smoke when exposed to high heat in hard drilling conditions. In well ventilated stopes, these contaminants are not able to accumulate in the workspace. However, in raise mining or in tight locations, ventilation may be inadequate, resulting in oil stains on exposed skin.

Liquid Shield polar rock drill oils resist heat breakdown much better than regular rock drill oils, and produce a much cleaner work environment.

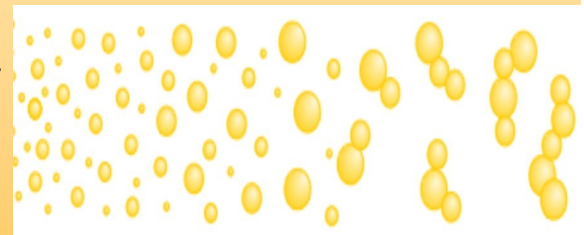
How do Liquid Shield polar rock drill oils work?

Liquid Shield polar rock drill oils are formulated with negatively charged fluids that adhere tenaciously to steel surfaces, which are positively charged. This attraction causes the lubricant to coat all components of the tool, ensuring consistent lubrication. This polar attraction also helps to minimize the tendency of oils to form oil fog caused by turbulent compressed air.



Agglomeration

Liquid Shield polar rock drill oils incorporate an additive that causes the oil particles to cling to each other and recombine when they collide in the tool. The combination of polar base fluids and this additive create a fluid that resists atomization within the tool, and forms large oil droplets when exiting the tool.



Particle size - Bigger is better

When it comes to oil particles expelled from the tool, size matters. Large particles tend to settle out rapidly, avoiding inhalation. Those particles that are inhaled tend to remain in the upper respiratory tract, posing minimal risk to personnel. Liquid Shield polar rock drill oils form large particles that tend to settle out rapidly. Some conventional rock drill oils can create oil fog that remains airborne for long periods of time, increasing exposure risks.

