

SLAG FINE*

Hill and Griffith's **Slag Fine** is a perlite material used as a slag coagulant in a molten metal application. **Slag Fine** is typically used with Iron, Brass and Bronze metals.

Description:

Perlite is a generic term for a naturally occurring siliceous volcanic rock. The distinguishing feature of perlite is that when it is heated to its softening range, it expands 4 to 20 times its original volume. This expansion is due to a small amount of water contained in the crude perlite rock. As the ore heats, the water vaporizes and pops allowing the expansion. Any slag present on the molten metal will adhere to the expanded perlite and continue to float. The combined slag/perlite can then be removed from the molten metal in large pieces, resulting in clean molten metal for the casting process.

Typical Product Properties:

Elemental Analyses: (typical)

SiO ₂ (Amorphous).....	69-73%
AL ₂ O ₃	12-13%
Na ₂ O.....	5-6%
K ₂ O.....	3-4%
CaO.....	1-2%
Fe ₂ O ₃	0.5-1.0%
MgO.....	0.2-0.5%
MnO.....	0.1-0.5%

Particle Size Distribution: (typical)

Plus 16 screen.....	0-10%
Plus 20 screen.....	29-35%
Plus 30 screen.....	63-70%
Plus 40 screen.....	70-90%
Plus 50 screen.....	93-95%
Plus 100 screen.....	95-100%

Appearance: From transparent light gray to glossy black

Application:

Slag Fine should be generously distributed on top of a full ladle of molten metal. Once the perlite has expanded, a color change will occur as the **Slag Fine** will turn to a white color. Because of the particle size, **Slag Fine** will disburse and expand very rapidly when in contact with molten metal. At this point, the material and slag should be removed from the metal.

Slag Fine should only be used once the pouring ladle has been filled.

If an insulating cover is desired, **SLAGONE** or **SLAG KLEEN** should be used in place of **SLAG FINE**.

Caution: **SLAG FINE** is a material that has the potential to absorb water. This is a safety concern in that if applied to molten metal, excess steam could be generated. **Slag Fine** should be stored in a dry environment.