

## DICAPERL® SLAG COAGULANT

DicaPerl® slag coagulant material is manually added to the surface of molten metal, after it is poured into a ladle. Slag that is present on the molten metal adheres to the perlite and floats for removal. With the removal of the combined perlite and slag, the metal is clean and ready for casting.

### Ladel Topping Applications

In ladle topping applications, expanded or unexpanded granular ore forms of perlite are added to molten metal pouring ladles. Most often the ore form is used which reacts with slag in the ladle to allow easy removal of the slag layer. In cases where it is desirable to maintain a metal temperature in a ladle, the expanded perlite layer forms an efficient insulating blanket.

When perlite is introduced during ladle filling, a gentle rolling motion is produced which cleanses the metal by coagulating impurities. In addition, ladle lining life is increased by virtue of a vitreous residual coating left on the refractory by the perlite. An added advantage of perlite in this application is that no objectionable smoke or noxious fumes are produced.

| Chemical Composition (on dry sample) | % by Wt. |
|--------------------------------------|----------|
| SiO <sub>2</sub> (Amorphous)         | 71.0     |
| Al <sub>2</sub> O <sub>3</sub>       | 12.5     |
| Na <sub>2</sub> O                    | 5.5      |
| K <sub>2</sub> O                     | 3.5      |
| CaO                                  | 1.5      |
| Fe <sub>2</sub> O <sub>3</sub>       | 1.4      |
| MgO                                  | 0.3      |
| Other trace minerals                 | 0-5      |



## DICAPERL® SOC-72 -PERLITE ORE

### Typical Properties

|                      |                                          |
|----------------------|------------------------------------------|
| Mineralogical .....  | Perlite Ore – Amorphous Mineral Silicate |
| Physical Form .....  | Granular                                 |
| Particle Shape ..... | Various shapes                           |
| Color .....          | Grey                                     |

#### Rotap Dry Sieve Particle Size Analysis:

|                                                       |       |
|-------------------------------------------------------|-------|
| Max. Wt. % Retained on U.S. Std. Sieve No. 16 .....   | 10.0% |
| Max. Wt. % Passing from U.S. Std. Sieve No. 100 ..... | 10.0% |

### Inherent Properties (Not Part of Specification)

|                                                |             |
|------------------------------------------------|-------------|
| Bulk Density (Dry), lbs./ft <sup>3</sup> ..... | 60-75       |
| LOI (due to chemical bound water) .....        | 2.5-3%      |
| Free Moisture Content, Wt. % .....             | <1.5        |
| Softening Point, °F .....                      | 1900        |
| Surface pH, (10% Slurry) .....                 | 7.0 Neutral |

### Other Information

|                      |                             |
|----------------------|-----------------------------|
| Shipping Point ..... | Socorro, NM                 |
| Packaging .....      | Per Customer Request (Bulk) |

