Special Purpose Granular

Revised 8/28/09

Asphalt Emulsion Grade Granular

General Description

Finely-ground sodium bentonite clay selectively mined from portions of the Clay-Spur bed of the Mowrey formation, known to have some of the highest montmorillonite content, cation exchange capacity, and lowest acid demand values.

Functional Use

An emulsifier for clay-based asphalt emulsions.

Purity

Hydrous aluminum silicate comprised principally of the clay mineral montmorillonite. Contains minor amounts of feldspar and quartz.

Chemical Formula

Dioctahedral smectite, an expanding layer silicate:
$(Na,Ca)_{0.33}(Al_{1.67}Mg_{0.33})Si_4O_{10}(OH)_2 \cdot nH_2O$

Elemental Composition

Typical analysis – moisture free.

SiO_2	63.02 %
Al_2O_3	21.08 %
Fe_2O_3	3.25 %
FeO	0.35 %
MgO	2.67 %
Na_2O	2.57 %
CaO	0.65 %
Trace	0.72 %
LOI	5.64 %

Moisture

Maximum 12% as shipped.

Dry Particle Size

25% Maximum retained on 40 mesh.
12% Maximum passing 200 mesh.

Wet Particle Size

Minimum 97% passing 200 mesh (74 microns).
Minimum 95% passing 325 mesh (44 microns).

pH

8.0 to 10.5 @ 5 % solids.

Packaging

50 or 100 pound multi-wall paper bags, or bulk