

MILLERS AND PROCESSORS OF BASE MINERALS

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DATA SHEET

Manganese Umber
Grade: S2
Use: Ceramic Pigment

Chemical Analysis (%):

| | | | | |
|----------|--------------------------------|-------------|----------------------------------|---|
| Typical: | Mn/Fe ratio: | 2.5:1 | | |
| | Mn | 40 - 43% | | |
| | Fe | 14% -18% | Mn → | MnO x 1.291 |
| | SiO ² | 4% - 6% | Mn → | MnO ₂ x 1.582 |
| | Al ₂ O ₃ | 0.2% -0.3% | Mn → | Mn ₃ O ₄ x 1.3883 |
| | S | 0.3% - 0.4% | MnO → | Mn x 0.7746 |
| | CaO | 4% - 6% | MnO ₂ → | Mn x 0.6319 |
| | MgO | 0.5% - 1% | Mn ₃ O ₄ → | Mn x 0.7203 |
| | K ² O | 0.01%-0.05% | | |
| | NA ² O | 0.05%-0.09% | | |

Physical Properties:

| | |
|-----------------------|------------------|
| Particle Size: | +45 micron 3-4%l |
| Moisture: | + -1% |

Application:

Ceramic Pigment

Packaging:

40kg, 3-ply paper bags. 1 ton per pallet.
Or
1000/1500 kg polypropylene bulk bags

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