



<<<<<<<<< **Composition of Frits** >>>>>>>>

**Frit 3110 (Ferro) HIGH ALKALI LEADLESS BODY FLUX**

Body flux alkaline frit. Soft sodium borosilicate frit for glazes. High expansion. Often used in crystal glazes. This frit has a very low melting point.

Cone Range: 08-8. New name is: KFG 4110  
Sub: Pemco P-1V05, Glostex GF-134, Fusion F-75

| Molecular Analysis ( M.W. 259.1 ) |       |                                |       |                  |       |
|-----------------------------------|-------|--------------------------------|-------|------------------|-------|
| K <sub>2</sub> O                  | 0.064 | Al <sub>2</sub> O <sub>3</sub> | 0.095 | SiO <sub>2</sub> | 3.003 |
| Na <sub>2</sub> O                 | 0.644 | B <sub>2</sub> O <sub>3</sub>  | 0.097 |                  |       |
| CaO                               | 0.293 |                                |       |                  |       |

| Percentage Analysis            |         |
|--------------------------------|---------|
| K <sub>2</sub> O               | 2.31 %  |
| Na <sub>2</sub> O              | 15.40 % |
| CaO                            | 6.34 %  |
| B <sub>2</sub> O <sub>3</sub>  | 2.59 %  |
| Al <sub>2</sub> O <sub>3</sub> | 3.73 %  |
| SiO <sub>2</sub>               | 69.63 % |



**Frit 3134 (Ferro) LEADLESS HIGH LIME BOROSILICATE GLAZE**

Intended for use as a lime and borate source in partially fritted glazes, lead bisilicate glazes and low cost hobby glazes cone 06-10. This frit has no alumina and this must be compensated for in the formulation of underglaze colors. The very high calcium makes this frit ideal for developing chrome-tin pinks and maroons.

Sub: Pemco P-54, O. Hommel 14 (242)

| Molecular Analysis ( M.W. 190.8 ) |       |                               |       |                  |       |
|-----------------------------------|-------|-------------------------------|-------|------------------|-------|
| Na <sub>2</sub> O                 | 0.317 | B <sub>2</sub> O <sub>3</sub> | 0.634 | SiO <sub>2</sub> | 1.476 |
| CaO                               | 0.683 |                               |       |                  |       |

| Percentage Analysis           |         |
|-------------------------------|---------|
| Na <sub>2</sub> O             | 10.30 % |
| CaO                           | 20.10 % |
| B <sub>2</sub> O <sub>3</sub> | 23.10 % |
| SiO <sub>2</sub>              | 46.50 % |



**Frit 4712 (Ferro) BOROSILICATE LEADLESS**

Hard clear frit, general purpose, for strong colors. 1040-1100C.

Sub: Pemco P-54, O. Hommel 14 (242)

| Molecular Analysis ( M.W. 350.0 ) |       |                                |       |                  |       |
|-----------------------------------|-------|--------------------------------|-------|------------------|-------|
| K <sub>2</sub> O                  | 0.200 | Al <sub>2</sub> O <sub>3</sub> | 0.350 | SiO <sub>2</sub> | 3.500 |
| Na <sub>2</sub> O                 | 0.200 | B <sub>2</sub> O <sub>3</sub>  | 0.650 |                  |       |
| CaO                               | 0.600 |                                |       |                  |       |

| Percentage Analysis            |         |
|--------------------------------|---------|
| K <sub>2</sub> O               | 5.29 %  |
| Na <sub>2</sub> O              | 3.48 %  |
| CaO                            | 9.45 %  |
| Al <sub>2</sub> O <sub>3</sub> | 10.01 % |
| B <sub>2</sub> O <sub>3</sub>  | 12.70 % |
| SiO <sub>2</sub>               | 59.06 % |

