1. PRODUCT IDENTIFICATION

Description

BLACK ENGOBE. It belongs to the "ENSP" series (COLOURED ENGOBE). Compound of frit: CAS Nº. 65997-18-4.

Application

Can be used for decoration of white body or red bodies. The temperature range is from 930 to 1050 $^{\circ}$ C, obtaining the maximum colour development at 980 $^{\circ}$ C. They can be used at higher temperatures obtaining other finishes

2. CHEMICAL COMPOSITION Metal oxides with concentrations less than 0.05% have not been determined.

Li₂O Na₂O	1-5	ZnO MnO	Cr ₂ O ₃ B ₂ O ₃ 5-10	CaF ₂ Bi ₂ O ₃	Co-Fe-Cr	10-20
K_2O	1-5	CdO	V_2O_5	P_2O_5	MEDIUM	0-0.5
MgO CaO	0-0.5 1-5	CoO NiO	MnO ₂ SiO ₂ 40-80	BeO CeO ₂	LOI	1-5
SrO BaO	0.5-1	Al ₂ O ₃ 10-20 Fe ₂ O ₃ 0-0.5	TiO ₂ 0-0.5 ZrO ₂	CuO Pr ₂ O ₃		
PbO		Sb_2O_3	SnO_2	2 = 3		

3 PHYSICAL-CHEMICAL PROPERTIES

Aspect Black powder

Color(fired) Black

4. COLORIMETRY * By Minolta ChromaControl (S)

L: **28.49** a: **0.33** b: **0.1**

5. DILATOMETRY * Data obtained with dilatometer BÄHR mod. DIL 801 L 10 ⁻⁷ C⁻¹

(25-300)C° (50-300)C° (300-500)C° (500-600)C° T^a Transformation T^a Softening Melting point 50.4 49.3 64 98.4 538 C° 885 C° >980 C°

6. GRANULOMETRIC DISTRIBUTION (WET WAY) * Data obtained by Malvern Instruments (Master Sizer 2000)

>10μ >25μ >40μ >70μ >120μ D50μ 34.8 11.9 5.1 1.1 0 5.9

7. RECOMMENDATIONS ON GLAZED OBJECTS INTENDED FOR CULINARY USE

Formulated without lead and cadmium.

Notes: n.a (not applicable), n.d (no information available), p.n (negative tests)

