# Made by dwit

## 1. PRODUCT IDENTIFICATION

Description

BLUE COBALT ENGOBE FOR HIGH TEMPERATURE. High Temperature Engobes "EASP" series is a collection of coloured engobes designed for glaze and decorate pieces of stoneware or porcelain.

Application

They can be applied by brush, aerograph or dipping. If they are used in single firing it is advisable to add 5% of Monocol V for better grip engobe to the piece. The temperature range is from 980 to 1280 ° C, obtaining the maximum colour development at 1280 ° C.

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

Li <sub>2</sub> O	1 6	ZnO	Cr <sub>2</sub> O <sub>3</sub>	CaF <sub>2</sub>		
$Na_2O$	1-5	MnO	$B_2O_3$	$Bi_2O_3$	MEDIUM	0-0.5
$K_2O$	1-5	CdO	$V_2O_5$	$P_2O_5$	LOI	5-10
MgO	0-0.5	CoO	$MnO_2$	BeO	Pig.Ing	5-10
CaO	0-0.5	NiO	SiO <sub>2</sub> 40-80	CeO <sub>2</sub>	Fig.iiig	3-10
SrO		Al <sub>2</sub> O <sub>3</sub> <b>20-40</b>	TiO <sub>2</sub> 0.5-1	CuO		
BaO		Fe <sub>2</sub> O <sub>3</sub> <b>0.5-1</b>	$ZrO_2$	Pr <sub>2</sub> O <sub>3</sub>		
PbO		$Sb_2O_3$	SnO <sub>2</sub>			

## **3 PHYSICAL-CHEMICAL PROPERTIES**

Aspect	Blue powder
Color(fired)	Blue cobalt

#### 4. COLORIMETRY \* By Minolta ChromaControl (S)

1 . 22 27	0.7	b. 10.7
1 . 37 37	a· -() /	n: -17/

		7 1
5. DILATOMETRY	* Data obtained with dilatometer BÄHR mod. DIL 801 L	10 <sup>-</sup> / C <sup>-</sup>

25	5-300)C°	(50-300)C°	(300-500)C°	(500-600)C°	T <sup>a</sup> Transformation	T <sup>a</sup> Softening	Melting point
	55 9	56	63 4	85.5	524 C°	883 Cº	>900 C°

6. GRANULOMETRIC DISTRIBUTION (WET WAY)					* Data obtained by Malvern Instruments (Master Sizer 2000)		
. 10	. 25.			. 120	DEO		

>10µ	>25µ	>40µ	>70µ	>120µ	D50µ
41.9	17.53	8.5	2.1	0.01	7.6

#### 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)

