

COLLABORATIVE STUDY

**“TESTING APPROACHES FOR THE RELEASE OF METALS FROM ENAMELLED OBJECTS
USED FOR COOKING AND BAKING”**

TECHNICAL SPECIFICATIONS

MULTI-MATRIX COMPLETE PHASES GROUP (10 LABS)

Each lab will perform the following 22 tests. 20 test by **filling** and the comparison with the **2 spiked liquids**:

1st	Oven Tray - Enamel A+	acetic acid 3% at 95°C for 2 h 3rd cycle
1st	Oven Tray - Enamel AA	
2nd	Oven Tray - Enamel A+	
2nd	Oven Tray - Enamel AA	
3rd	Oven Tray - Enamel A+	acetic acid 3% at 95°C for 30 min 3rd cycle
3rd	Oven Tray - Enamel AA	
4th	Oven Tray - Enamel A+	
4th	Oven Tray - Enamel AA	
5th	Oven Tray - Enamel A+	acetic acid 4% at 22°C for 24 h 1st + 3rd cycle*
5th	Oven Tray - Enamel AA	
6th	Oven Tray - Enamel A+	citric acid 0,5% at 100° C for 2 h 1st + 2nd + 3rd cycle
6th	Oven Tray - Enamel AA	
7th	Oven Tray - Enamel A+	distilled water at 95°C for 2 h 3rd cycle
7th	Oven Tray - Enamel AA	
1st	Grill - Enamel A+	acetic acid 3% at 95°C for 2 h 3rd cycle
1st	Pot - Enamel AA	
2nd	Grill - Enamel A+	acetic acid 3% at 95°C for 30 min 3rd cycle
2nd	Pot - Enamel AA	
3rd	Grill - Enamel A+	acetic acid 4% at 22°C for 24 h 1st + 3rd cycle
3rd	Pot - Enamel AA	
1st	Spiked liquid**	concentration and metals still to be determined
2nd	Spiked liquid**	

*Simulant to be collected in an homogeneous solution to be sent to the **Reduced Numerosity Sample Group** in order to compare the Porcelain (Vitreous) Enamel study with the study on Ceramics.

** Spiked: simplified liquids as foothold for the analytical method.

REDUCED NUMEROSITY SAMPLE GROUP (20 LABS)

Each lab will perform the following **8 tests**. **4 tests** by **filling**, **2 tests** on **liquids** and the comparison with the **2 spiked liquids**:

1st	Oven Tray – Enamel A+	acetic acid 3% at 95°C for 2 h 3rd cycle
1st	Oven Tray - Enamel AA	
2nd	Oven Tray - Enamel A+	acetic acid 3% at 95°C for 30 min 3rd cycle
2nd	Oven Tray - Enamel AA	
1	Liquid from Oven Tray – Enamel A+	acetic acid 4% at 22°C for 24 h 1st + 3rd cycle*
1	Liquid from Oven Tray – Enamel AA	
1st	Spiked liquid**	concentration and metals still to be determined
2nd	Spiked liquid**	

*Simulant collected in an homogeneous solution by the **Multi-Matrix Complete Phases Group** in order to compare the Porcelain (Vitreous) Enamel study with the study on Ceramics.

** Spiked: simplified liquids as foothold for the analytical method.

INSTRUCTIONS ON HOW TO MAKE THE TESTS WILL BE AVAILABLE SOON

- **Note on why each test was included**
 - **How to prepare the samples**
 - **How to clean the samples**
 - **How to run the tests**