



Universitat de Girona

Departament d'Enginyeria
Química, Agrària i Tecnologia
Agroalimentària

METAL MIGRATION FOR TOYS SECURITY

UNE EN 71-3

1.- SAMPLE DESCRIPTION

- EUROKOTE GRUESO paper

2.- FACTORY

- SARRIOPAPEL, S. A.

3.- TEST CONDITIONS.

Sample preparation and metals extraction has been carried out as UNE EN 71-3 norme specifies.

Determinations of antimony, arsenic, barium, cadmium, chromium, lead and selenium have been made by ICP-induced plasma spectrometry while mercury has been analysed by atomic absorption technique.

4.- RESULTS.

Date of testing: by ICP technique: 08/04/98 and
 by AA technique: 22/04/98



Metal migration.

| | <u>Result</u> | <u>Maximum allowed value</u> |
|----------|---------------|------------------------------|
| Antimony | < 1 | 60 |
| Arsenic | < 1 | 25 |
| Barium | < 1 | 1000 |
| Cadmium | < 1 | 75 |
| Chromium | < 2 | 60 |
| Lead | < 5 | 90 |
| Mercury | < 1 | 60 |
| Selenium | < 3 | 500 |

These results are expressed in mg of the element to Kg of material. Maximum values are those allowed in UNE EN 71-3 norme for these specific metals all them refered to soluble part.

5.- CONCLUSION.

The paper sample analysed: Eurokote Grueso **is agree** with UNE EN 71-3 norme about toys security.

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