

Date: 15th October 1900

Report No: 3105

PRODUCT EVALUATION REPORT

545

Item: Modelling Clay

Item Code: Proposed New Line

Supplier: Newclay Products Ltd.

INTRODUCTION

A sample of a plasticine type modelling material manufactured by Newclay Products Ltd. was submitted by Stationery and Book Merchandise Department, for an evaluation of its toxicity compared with the Boots Plastiplay.

EXPERIMENTAL

The two types of plasticine were examined for compliance with the toxicity requirements in the draft CEN Standard Safety of Toys Chemical Properties section 3.3.

The samples of plasticine were prepared as described in section 4.2 of the draft CEN Standard.

viz.

"Comminute a sample of the coating or substance under test so that it is capable of passing through a metal sieve with an aperture of 0.5mm. If a sample contains grease, oil or other similar matter, remove that grease, oil or matter by means of a suitable solvent before comminution.

Mix the sample so prepared with 50 times its mass of an aqueous solution (at a temperature of $21 \pm 1^\circ\text{C}$) of hydrochlorine and containing 0.25% by mass of hydrogen chloride (0.07 N HCl) and then shake the mixture for 1 minute.

Check the acidity of the mixture. If the pH is more than 1.5 add drop by drop with shaking an aqueous solution of hydrochloric acid containing 7.3% by mass of hydrogen chloride (2 N HCl) until the pH is 1.5 or less.

Shake the mixture continuously for 1 hour and then allow the mixture to stand for 1 hour."

The mixture was then filtered, further diluted and analysed by atomic absorption spectrophotometry using flame and flameless techniques.

RESULTS

	Soluble p.p.m.						
	Lead	Cadmium	Chromium	Barium	Mercury	Arsenic	Antimony
Newclay							
Black	6	2	1	60	<1	<1	<1
Brown	1	3	1	120	<1	<1	<1
Grey	1	2	1	34	<1	<1	<1
Dark Green	7	2	1	24	<1	<1	<1
Light Green	2	1	1	50	<1	<1	<1
White	7	2	1	70	<1	<1	<1
Yellow	1	2	1	90	<1	<1	<1
Orange	1	2	1	70	<1	<1	<1
Red	1	9	1	105	<1	<1	<1
Blue	3	4	1	94	<1	<1	<1

SUMMARY

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 Supplier: Newclay Products Ltd.
 Merchandise Department: Stationery & Book

Tests carried out:

The levels of soluble toxic elements in the Newclay and the present Boots product were determined.

CONCLUSIONS

The levels of soluble toxic elements were found to be well within the limits for products given in the draft CEN Standard Safety of Toys Chemical Properties Section 3.3 and the Newclay Plasticine is suitable for inclusion into the Boots range.

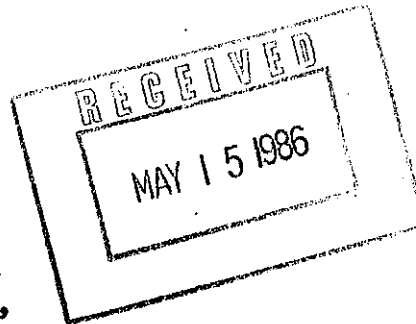


J & T Harbutt & Co Ltd

manufacturers of industrial, educational and modelling compounds

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Judy Jorgensen,
Sales Secretary,
J.L. Hammett Co. Inc.,
165, Water Street,
Lyons,
New York, 14489,
U.S.A.

May 7th. 86.

Dear Ms. Jorgensen,

In reply to your letter of the 28th. April
regarding the safety report on Newplast.

The report included here was issued by Messrs.
Boots & Co., major chemists in this country. Tests were
carried out some while ago in 1980 but the material has
remained unchanged since then.

We trust this will satisfy your requirements.

Yours faithfully,

Patricia Lewis (Secretary)

P.P.

J.C.N. Harbutt,
Managing Director.



Merchandise Technical Services

Materials Sciences Laboratory

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Reporter(s)	Mr. F. Page <i>Fh Page</i>
Approved	Dr. R. P. Sheppard <i>R.P. Sheppard</i>

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Date 15th October 1980