



ISTITUTO DI RICERCHE E COLLAUDI

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Notificato CE 0068 - Accreditato SINCERT 047A - Accreditato SINAL 0019 - Competent Body: EMC 2004/108/CE e BT 2006/95/CE

Autorizzazioni:

Ministero delle Infrastrutture e dei Trasporti per legge 1086 - Ministero dell'Università e della Ricerca Scientifica e Tecnologica per Legge 46/82 -

Ministero delle Attività Produttive - Ministero dell'Interno per prove reazione al fuoco, estintori portatili e carrellati, evacuatori di fumo e calore -

Ministero della Salute per analisi in BPL e prove I.S.P.E.S.L. - Regione Lombardia per analisi acque potabili e non - Ministère de l'Industrie, de la

Poste et des Télécommunications per pentole a pressione e verifiche di sorveglianza alla produzione

Certificazione di prodotto - Controlli non distruttivi - Prove tecnologiche - Termografia - Prove termotecniche - Rilievi estensimetrici - Prove calcestruzzi - Geotecnica
Analisi chimica - Agroalimentare - Cosmesi - Metallografia - Microscopia elettronica - Sicurezza - Ecologia - Controllo qualità - Ricerche - Consulenze

English translation of the original Italian test report

Rho, 15 July 2008

COLIBRI' SYSTEM S.p.A.
Viale Ortles, 54/a
20139 MILANO

TEST REPORT No. 2048-2008 page 1 of 4

NPA 1182/08
Order: confirmed by fax of 27/06/2008

Examined sample:

Plastic folder in 5 versions:
transparate, yellow, green, orange, light blue

Tests performed according:

- UNI EN 71 standard, parts 2-07, 3-02, 9-08, 10-06, 11-06
- DM 29/07/94: - cadmium and lead on paints
- cadmium on plastic material
- benzene and solvents on paints
- Directive 2005/84/CE : phtalate contents

Results:

see following pages

*based on tests' results the item is considered complying with
applied standards, directives and decrees*

Testing date:

from 07 till 15/07/2008

This test report refers only to the tested samples and can be reproduced only in its full version.

Laboratory technician

Technical manager



RESULTS

UNI EN 71-2:2006 – Safety of toys – flammability

Applied clause	Description	Results
4.1	General requirements: Materials	Pass

UNI EN 71-3:2002 – Safety of toys – migration of certain elements

Description	Results
Determination of Hg, Se, Ba, Sb, As, Cd, Cr, Pb Note: see attached table	Pass

The determination is carried out on test portions prepared and treated according to the standard UNI EN 71-3:2002. The migrated elements have been determined by inductively coupled plasma-mass spectrometry (ICP)

REQUIRED VALUES

	Hg (mg/kg)	Se (mg/kg)	Ba (mg/kg)	Sb (mg/kg)	As (mg/kg)	Cd (mg/kg)	Cr (mg/kg)	Pb (mg/kg)
Max values (for all materials.)	60,00	500,00	1000,00	60,00	25,00	75,00	60,00	90,00
Max values (modelling paste)	25,00	500,00	250,00	60,00	25,00	50,00	25,00	90,00

OBTAINED RESULTS

Sample denomination	Weight (g)	Volume (g)	Hg (mg/kg)	Se (mg/kg)	Ba (mg/kg)	Sb (mg/kg)	As (mg/kg)	Cd (mg/kg)	Cr (mg/kg)	Pb (mg/kg)
Transparate plastic	0,2192	10,00	< 1	< 5	5,5	< 1	< 2	< 1	< 1	< 1
Yellow plastic	0,2558	10,00	< 1	< 5	4,7	< 1	< 2	< 1	< 1	< 1
Green plastic	0,2154	10,00	< 1	< 5	6,0	< 1	< 2	< 1	< 1	< 1
Orange plastic	0,2449	10,00	< 1	< 5	5,3	< 1	< 2	< 1	< 1	< 1
Light blue plastic	0,2013	10,00	< 1	< 5	6,4	< 1	< 2	< 1	< 1	< 1
White seregraphy	0,0900	10,00	< 1	< 5	13,8	< 1	< 2	< 1	< 1	4,8
Blue seregraphy	0,0500	10,00	< 1	< 5	25,1	< 1	< 2	< 1	< 1	< 1



UNI EN 71-9:2008 – Safety of toys: organic chemical compounds - requirements

Monomers (table 2D)

Preparation and extraction according to the point 6 of the standard UNI EN 71-10:2006;
Analysis performed according to point 5.5 of the standard UNI EN 71-11:2006.

Acrylamide	:	<0,02 mg/l	limit 0,02 mg/l
Bisphenol A	:	0,1 mg/l	limit 0,1 mg/l
Formaldehyde	:	2 mg/l	limit 2,5 mg/l
Phenol	:	<5 mg/l	limit 15 mg/l
Styrene	:	<0,50 mg/l	limit 0,75 mg/l

Limit expressed as concentration on liter of simulated liquid

Solvents migration (table 2E)

Preparation and extraction according to the point 6 of the standard UNI EN 71-10:2006;
Analysis performed according to point 5.5 of the standard UNI EN 71-11:2006.

Threeclorethylene		<0,02 mg/l	limit 0,02 mg/l
Dichloromethan		0,06 mg/l	limit 0,06 mg/l
2-metossiethyl acetate		0,5 mg/l	limit *
2-etossietanol		<0,5 mg/l	limit *
2-etossiethyl acetate		<0,5 mg/l	limit *
Bis(2-metossiethyl)etere		<0,5 mg/l	limit *
2-metossipropyl acetate		5 mg/l	limit *
Methanol		5 mg/l	limit 5 mg/l
Nithrobenzene		<0,02 mg/l	limit 0,02 mg/l
Cyclohexanone		<46 mg/l	limit 46 mg/l
3,5,5 threemethyl 2 cyclohexane 1 one		<3 mg/l	limit 3 mg/l
Toluene		2 mg/l	limit mg/l
Ethylbenzene		1 mg/l	limit 1 mg/l
Xilenes (isomers)		<2 mg/l	limit 2 mg/l tot

* < 0,5 mg/l like summation of 5 solvents

Limit expressed as concentration on liter of simulated liquid

Plasticizers migration (table 2D)

Preparation and extraction according to the point 6 of the standard UNI EN 71-10:2006;
Analysis performed according to point 5.8 of the standard UNI EN 71-11:2006.

Threephenoxy phosphate	:	< 0,03 mg/l
Three-o-cresyl phosphate	:	0,03 mg/l
Three-m-cresyl phosphate	:	0,03 mg/l
Three-p-cresyl phosphate	:	< 0,03 mg/l

Limit : 0,03 mg/l (expressed as concentration on liter of simulated liquid)



DM 29/07/1994

Content of cadmium

Analysis performed by ICP analysis after dissolution in acid solution.

Transparate plastic	1 mg/kg
Yellow plastic	1 mg/kg
Green plastic	1 mg/kg
Orange plastic	1 mg/kg
Light blue plastic	1 mg/kg
White serigraphy	1 mg/kg
Blue serigraphy	1 mg/kg
Limit	< 0,01 % (0,01 % = 100 mg/kg)

Content of lead

Analysis performed by ICP analysis after dissolution in acid solution
Expressed like total Pb

White serigraphy	5 mg/kg
Blue serigraphy	5 mg/kg
Limit	not admitted like sulphate or carbonate

Content of solvents on mix paints

Analyses performed in after extraction with carbon sulphur

Content of residual benzene	: < 1 mg/kg	limit: 5 mg/kg
Content of residual solvent	: < 5 mg/kg	limit: 5 mg/kg

The following solvents have been detected:

methanol, ethanol, dichloromethan, methylacetate, MEK, isobuthanol, cyclohexanone, acetate of isobutyl, MIBK, toluene, n-epthan, tetrachlorethylen, styrene, cellosolve, methylformate, isopropanol, n-propanol, ethylacetate, butanol, exanone, threeclorethylen, cyclohexanone, acetate of n-butyl, isotane e xylene.

2005/84/EC DIRECTIVE

Analysis has been performed on transaparate folder

Bis (2-ethylhexyl) phtalate (DHEP)	:	< 0.01 %
Dibutyl phtalate (DBP)	:	< 0.01 %
Di-isonyl phtalate (DINP)	:	< 0.01 %

Limit:

shall not be used as substances or as constituents of preparations, at concentrations of greater than 0,1 % by mass of the plasticised material, in toys and childcare articles.