

EUROPEAN STANDARD
NORME EUROPÉENNE
EUROPÄISCHE NORM

EN 71-5

September 2015

ICS 97.200.50

Supersedes EN 71-5:2013

English Version

Safety of toys - Part 5: Chemical toys (sets) other than
experimental sets

Sécurité des jouets - Partie 5 : Jouets chimiques
(coffrets) autres que les coffrets d'expériences

Sicherheit von Spielzeug - Teil 5: Chemisches Spielzeug
(Sets) ausgenommen Experimentierkästen

This European Standard was approved by CEN on 10 August 2015.

CEN members are bound to comply with the CEN/CENELEC Internal Regulations which stipulate the conditions for giving this European Standard the status of a national standard without any alteration. Up-to-date lists and bibliographical references concerning such national standards may be obtained on application to the CEN-CENELEC Management Centre or to any CEN member.

This European Standard exists in three official versions (English, French, German). A version in any other language made by translation under the responsibility of a CEN member into its own language and notified to the CEN-CENELEC Management Centre has the same status as the official versions.

CEN members are the national standards bodies of Austria, Belgium, Bulgaria, Croatia, Cyprus, Czech Republic, Denmark, Estonia, Finland, Former Yugoslav Republic of Macedonia, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden, Switzerland, Turkey and United Kingdom.



EUROPEAN COMMITTEE FOR STANDARDIZATION
COMITÉ EUROPÉEN DE NORMALISATION
EUROPÄISCHES KOMITEE FÜR NORMUNG

CEN-CENELEC Management Centre: Avenue Marnix 17, B-1000 Brussels

Contents	Page
European foreword.....	5
Introduction	7
1 Scope.....	8
2 Normative references.....	8
3 Terms and definitions	9
4 Plaster of Paris (gypsum) moulding sets.....	10
4.1 Marking.....	10
4.2 First aid information.....	10
4.3 Safety rules	10
5 Oven-hardening plasticised PVC modelling clay sets.....	11
5.1 Chemical substances	11
5.2 Marking.....	11
5.3 First aid information.....	11
5.4 Safety rules	12
6 Moulding sets.....	12
6.1 Polystyrene granules sets	12
6.1.1 Chemical substances	12
6.1.2 Marking.....	12
6.1.3 First aid information.....	12
6.1.4 Safety rules	13
6.2 Embedding sets.....	13
6.2.1 General.....	13
6.2.2 Packaging.....	13
6.2.3 Marking.....	13
6.2.4 First aid information.....	13
6.2.5 Safety rules	13
7 Adhesives, paints, lacquers, varnishes, thinners and cleaning agents (solvents) supplied or recommended in model sets	14
7.1 General.....	14
7.2 Adhesives	14
7.2.1 Water-based adhesives.....	14
7.2.2 Solvent-based adhesives.....	17
7.3 Water-based paints or lacquers.....	20
7.3.1 General.....	20
7.3.2 Packaging.....	20
7.3.3 Marking.....	20
7.3.4 First aid information.....	21
7.3.5 Safety rules	21
7.4 Solvent-based paints, lacquers, thinners and cleaning solvents	21
7.4.1 General.....	21
7.4.2 Packaging.....	22
7.4.3 Marking.....	22
7.4.4 First aid information.....	22

7.4.5 Safety rules.....	23
8 Marking	23
8.1 General	23
8.2 Marking of the primary packaging.....	23
8.2.1 General	23
8.2.2 Manufacturer's identification	23
8.2.3 Warning phrases.....	23
8.3 Marking of individual containers and any packagings	24
9 Instructions for use.....	24
9.1 General	24
9.2 Contents list.....	24
9.3 Advice for adult supervision.....	24
9.4 Safety rules.....	25
9.5 Instructions for carrying out the activities	25
9.6 Spills and disposal of chemicals	25
10 Test methods.....	26
10.1 General	26
10.2 Determination of plasticisers in oven-hardening polyvinyl chloride (PVC) modelling clay sets	26
10.2.1 Principle.....	26
10.2.2 Standards and reagents.....	26
10.2.3 Apparatus	27
10.2.4 Preparation of standard solutions	28
10.2.5 Sampling	29
10.2.6 Sample preparation	30
10.2.7 Procedure	30
10.2.8 Evaluation of results.....	31
10.2.9 Test report	33
10.3 Determination of the emission of benzene, toluene and xylenes from oven-hardening plasticised PVC modelling clay sets and polystyrene granules sets.....	33
10.3.1 Principle.....	33
10.3.2 Standards and reagents.....	34
10.3.3 Apparatus	34
10.3.4 Preparation of standard solutions	36
10.3.5 Sampling	36
10.3.6 Sample preparation	36
10.3.7 Procedure	36
10.3.8 Evaluation of results.....	36
10.3.9 Test report	37
10.3.10 Critical control points.....	37
10.4 Determination of styrene content in polystyrene granules.....	37
10.4.1 Principle.....	37
10.4.2 Standards and reagents.....	37
10.4.3 Apparatus	38
10.4.4 Preparation of the standard solutions.....	39
10.4.5 Sampling	39
10.4.6 Sample preparation	39
10.4.7 Procedure	39
10.4.8 Evaluation of results.....	39
10.4.9 Test report	39
10.5 Determination of organic solvents.....	40
10.5.1 General	40