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BSI Standards Publication

Packaging — Child resistant packaging — Mechanical test methods for reclosable child resistant packaging systems

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National foreword

This British Standard is the UK implementation of EN ISO 13127:2012. It is identical to ISO 13127:2012, incorporating corrigendum December 2012.

The UK participation in its preparation was entrusted by Technical Committee PKW/0, Packaging, to Subcommittee PKW/0/3, Child Resistant Packaging.

A list of organizations represented on this subcommittee can be obtained on request to its secretary.

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English Version

Packaging - Child resistant packaging - Mechanical test
methods for reclosable child resistant packaging systems (ISO
13127:2012)

Emballages - Emballages à l'épreuve des enfants -
Méthodes d'essais mécaniques pour systèmes d'emballage
refermables à l'épreuve des enfants (ISO 13127:2012)

Verpackung - Kindergesicherte Verpackung - Mechanische
Prüfverfahren für wieder verschließbare kindergesicherte
Verpackungssysteme (ISO 13127:2012)

This European Standard was approved by CEN on 30 September 2012.

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Foreword

This document (EN ISO 13127:2012) has been prepared by Technical Committee CEN/TC 261 "Packaging", the secretariat of which is held by AFNOR, in collaboration with Technical Committee ISO/TC 122 "Packaging".

This European Standard shall be given the status of a national standard, either by publication of an identical text or by endorsement, at the latest by April 2013, and conflicting national standards shall be withdrawn at the latest by April 2013.

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Introduction

A significant number of suspected cases of ingestion by children of products used about the home is reported to the medical profession each year. Most are not serious and those that are associated with more serious side effects involve products known to be hazardous, e.g. certain medicinal products, liquid fuels and solvents, strongly acid or alkaline preparations and some garden products. Most commonly used household detergents, cleaning agents and maintenance and care products are not known to have caused injury. However, whether ingestion (actual or suspected) causes injuries or not, such incidents can have traumatic effects on both the child and its parents.

The use of potentially hazardous agents in certain products is necessary to achieve effectiveness; consequently steps have to be taken to limit the occurrence of accidents. One approach has been to try to increase general awareness of hazards associated with various products. Nevertheless, proper labelling and information by the manufacturer is important for the safe use of products in the home.

Another approach has been the use of child resistant packaging to put a physical barrier between the child and the hazardous product. Such packaging should only be used for products as mentioned above since, if used in other circumstances, it could lead to confusion among consumers. It is important to recognize that it is unrealistic to expect that any functional packaging can be totally impossible for a child to open and this type of packaging cannot be a substitute for normal safety precautions. The packaging functions as a last defence if other barriers separating children and hazardous products have failed. Hence, the overall responsibility rests with the parents or other responsible adults.

The aim of this International Standard is to establish mechanical test methods to safeguard child resistance properties of the packaging system.

According to ISO 8317, the panel test is intended for initial type approval but it does not sufficiently cover change management.

NOTE Change management covers, but is not limited to, for example, change of supplier, packaging material, component manufacturing site, material brand or scale up.

Those changes need to be assessed using risk management procedures. Mechanical test methods deliver scientific data which introduce a more scientific method of ensuring compliance with the originally type tested package. The test results are essential for an appropriate risk assessment.

The object of this International Standard is to permit the comparison, by mechanical testing, of the physical parameters of the packaging system undertaken with those of the individual units tested for certification purposes. It is the responsibility of the component manufacturer to provide access to test methods and test data to the customer.

Packaging — Child resistant packaging — Mechanical test methods for reclosable child resistant packaging systems

1 Scope

This International Standard specifies test methods for mechanical testing of reclosable child resistant packaging. The data generated by these mechanical test methods are suitable for comparing child resistant characteristics of related reclosable packaging systems.

This International Standard is not intended for routine quality assurance purposes.

NOTE The use of children and adults for testing in accordance with ISO 8317 is an essential feature of that standard.

2 Normative references

The following referenced documents are indispensable for the application of this document. For dated references, only the edition cited applies. For undated references, the latest edition of the referenced document (including any amendments) applies.

ISO 8317, *Child-resistant packaging — Requirements and testing procedures for reclosable packages*

3 Terms and definitions

For the purposes of this document, the terms and definitions given in ISO 8317 and the following apply.

3.1

mechanical testing

documented and reproducible test methods intended to measure the resistance of the relevant features of a child resistant packaging system

3.2

essential characteristics

those elements of the container/closure system that are critical for maintaining the child resistant functionality

NOTE See 4.3 for examples of essential characteristics.

3.3

thread system

child resistant packaging system having a combination of container and closure that is reliant on having compatible threads in order to maintain the child resistance functions and sealing integrity

3.4

squeeze and turn system

child resistant packaging system which requires the user to squeeze the closure at designated points while simultaneously applying a torque to unscrew the closure from the container

3.5

push and turn system

press and turn system

child resistant packaging system which requires the user to apply a downward force while simultaneously applying a torque to unscrew the closure from the container