Child resistant packaging
A consumer's guide to the standards for child resistant packaging

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By law, manufacturers must package certain household items – including some medicines, cleaning products and gardening goods – in child resistant packaging.

The aim of child resistant packaging is to keep little fingers out of products which could harm them, while ensuring that adults can still open and close packaging easily. The World Health Organization and UNICEF state that child resistant packaging is one of the best-documented successes in preventing accidental poisoning of children.

A child resistant package usually requires a special 'trick' to open it – something too complicated for most young children to work out. For example, users might have to push or squeeze a lid at the same time as turning it. It’s also possible to make non-reclosable packs, such as blister packs, child resistant by using very strong material or covers that have to be peeled off.

Several European standards have been developed to help manufacturers design packaging that is both safe and effective.

Child resistant packaging standards: the basics

- The standards explain how to carry out objective tests of child resistance, helping designers and makers ensure that most children can’t access poisonous products
- The latest standard, BS EN ISO 13127:2012, introduces mechanical tests for checking the safety of minor changes to existing child resistant packs
- BS EN ISO 8317:2004 explains test methods for reclosable packs such as bleach or medicine bottles
- BS EN 14375:2003 covers non-reclosable packaging for pharmaceutical products (for example blister packs of tablets) and BS EN 862:2005 covers non-reclosable packaging for non-pharmaceutical products
Child resistant packaging standards: the details
The standards state that child resistant packaging should be tested with children and adults as follows:

- A group of children aged between 42 and 51 months are asked to open a pack. If they don’t succeed after five minutes, they are shown how to open it, and then given five more minutes to try again.
- A child resistant pack should be impossible to open for at least 85 per cent of children in the first five minutes, and for at least 80 per cent following the silent demonstration.
- The pack is also tested with a panel of adults aged between 50 and 70. At least 90 per cent of this group must be able to open and reclose the pack or – for a non-reclosable pack – open it and remove one item. The test uses older adults as they are most likely to have difficulty opening and reclosing child resistant containers.
- Group sizes vary because a sequential testing method is used. The child test, for example, usually involves between 30 and 60 children, but testers might need to use as many as 200 children to get a clear picture of a pack’s child resistance.

Mechanical tests for minor modifications
BS EN ISO 13127:2012 details for the first time how manufacturers can use machines rather than people to test the child resistance of some packaging. It describes ten mechanical tests for different types of packs, such as testing the force needed to push, pull or squeeze a bottle open.

These tests are to be used only in the case of minor modifications to existing child resistant packaging. They provide a reliable way to compare modified packs with products that have already been tested with children. And they mean consumers can be sure that any alterations to packs are as safe as the original.

Minor modifications include very slight alterations to a product, such as a change in the thread contact between a bottle and a lid. Any major changes or new designs must still be tested with real people.

Child resistant but not child proof
Unfortunately, no container that’s designed for everyday use can be guaranteed totally child proof so it’s always vital to take safety precautions with hazardous products. See Safety Checklist, below, for details.

Safety checklist

Child resistant packaging is a last line of defence. To prevent children from accessing harmful household substances, always:

- Keep medicines and chemicals out of sight and reach of children, preferably in a locked high cupboard
- Where possible, buy products in child resistant containers
- Always store chemicals in their original containers
- Dispose of unwanted medicines and chemicals safely
- Ensure medicines kept in the fridge are not accessible to children

If your child swallows something that could be poisonous:

- Call 999 for an ambulance
- Find out what, when and how much your child has swallowed
- Keep a sample or the container to show the ambulance crew
Frequently asked questions

Q. What is BSI?
A. BSI is the UK National Standards Body which has been developing standards for more than 100 years to make products and services safer for consumers. Standards set out good practice and guidelines for organizations to follow. BSI is the UK member of European standards organization CEN.

Q. How was the new mechanical testing standard developed?
A. The European standard has been developed over the last seven years, with major input from BSI, the UK packaging industry and consumers. For further information, please contact consumer@bsigroup.com

Q. Which items have to be sold in child resistant packaging?
A. By law, certain household substances that are poisonous when swallowed or inhaled, or can cause skin corrosion, must be sold in child resistant packaging. This includes household bleach and some toiletries and gardening products. Only those medicines that contain aspirin, paracetamol or more than 24mg of iron must legally be in child resistant packaging.

Q. What about prescription medicine packaging? Is this child resistant?
A. Not always. If pharmacies dispense prescription medicines in their original factory packaging, such as a box containing blister packs of tablets, the packs will not have been subject to standardised testing for child resistance. It’s important to take extra care when storing these medicines.

Q. What if child resistant packaging makes it too hard for me to open things?
A. The test method aims to take into account difficulties some older or disabled people can have as well as protecting children but if you have difficulty with certain packaging on prescription, you can ask the pharmacist to use a container that you can open. See also our leaflet on Easy to open packaging at bsigroup.com/consumers

Q. Where can I get copies of the standards referred to in this leaflet?
A. Your local public library may be able to help you access reference copies, or you can buy copies from BSI at shop.bsigroup.com

Useful information
British Standards (BSI)
020 8996 9001
www.bsigroup.com

CEN
(European standards organization)
www.cen.eu

Child Accident Prevention Trust (CAPT)
www.capt.org.uk

RoSPA
(Accident prevention charity)
www.rospa.com