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trading standards law explained

Jewellery safety: metal content

In the guide

The law
Nickel, lead and cadmium
Nickel in products
- Products for use in piercings ('post assemblies')
- All products

Lead in products
Cadmium in products
What should I do to ensure I comply?
Trading Standards
In this update
Key legislation

Although the United Kingdom left the European Union (EU) in 2021, certain pieces of legislation (known as 'assimilated law') continue to apply until such time as they are replaced by new UK legislation, revoked or permitted to expire. This means that our guidance still contains references to legislation that originated from the EU.

This guidance is for England, Scotland and Wales

Nickel, lead and cadmium in jewellery are covered by legislation. Products that come into direct and prolonged contact with the skin (for example, earrings, wristwatches, rivets and zips) must not release nickel more quickly than a specific rate.

There are additional specific rules for post assemblies for use in piercings, and some lower tolerances for products with just a nickel coating. Cadmium and lead are toxic and are therefore also subject to restrictions.

If you are not the manufacturer or importer you should check with your supplier that the products comply with the Regulations.

The law

The legislation covering the restrictions on nickel, lead or cadmium is found in assimilated Regulation (EC) No 1907/2006 *concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH)*. Following the UK's withdrawal from the EU, the EU REACH regulation has been bought into UK law and is now known as UK REACH.

Anyone who supplies products that are intended to come into direct and prolonged contact with the skin, and which may contain nickel or its compounds, lead or cadmium, will be affected by the Regulations. Examples are as follows:

- earrings and other body piercing items
- necklaces, bracelets, chains, anklets and finger rings
- wristwatch cases, watch straps and tighteners

Nickel, lead and cadmium

Nickel is one of the most abundant metallic elements, likely to be found in most metals in trace quantities, including coins.

Lead is a heavy metal that has often been used in jewellery, to make the article heavier, brighten colours, and to stabilise or soften plastic. However, lead is a toxic metal, which doesn't break down in the environment and accumulates in the human body.

Cadmium is also a heavy metal that has been used for over a century in both fashion and fine jewellery products. Small amounts of cadmium may be added to alloys used to make jewellery in order to impart specific technical and functional attributes to the metals. It may be present in jewellery as part of the metal alloy, solder or gold coating for electroforming / electroplating, or as a pigment or stabiliser in non-metal components.

However, cadmium has also been recognised as a toxin and carcinogen that is harmful when ingested or inhaled.

Nickel in products

Products for use in piercings ('post assemblies')

Any post assembly for use in piercings must have a rate of nickel release less than 0.2 micrograms per square centimetre, per week. The post assembly is the part of the product designed for insertion into the wound caused by piercing, plus any faces that hold the piece in and against the wound (such as the ball or butterfly).

All products

As well as the specific rule for post assemblies for use in piercings, all products that come into direct and prolonged contact with the skin must have a rate of nickel release less than or equal to 0.5 micrograms per square centimetre, per week. In other words, it is prohibited to supply the product if the rate of release

is greater than 0.5 micrograms per square centimetre, per week. 'Direct and prolonged contact' means touching the skin under normal use for continuous periods of time.

A product may contain nickel in higher concentrations; however, this only applies where a product has a coating and the coating is sufficient to ensure that the rate of nickel released from parts in direct and prolonged contact with the skin is less than 0.5 micrograms per square centimetre, per week, for a minimum period of two years' normal use.

When testing for nickel migration, laboratories may make an allowance for uncertainty in the results using the prescribed test methods, as outlined in European Standard BS EN 1811: *Reference test method for release of nickel from all post assemblies which are inserted into pierced parts of the human body and articles intended to come into direct and prolonged contact with the skin*.

Lead in products

Jewellery must not be supplied, or lead used in any individual part of jewellery articles, if the concentration of lead is equal to or greater than 0.05% by weight.

This includes jewellery and imitation jewellery articles and hair accessories, such as:

- bracelets, necklaces and rings
- piercing jewellery
- wristwatches and wristwear
- brooches and cufflinks

There are some exemptions to this, such as the use of crystal lead glass in jewellery.

Cadmium in products

The Regulations restrict cadmium content in jewellery to 0.01% (100 mg/kg) by weight of metal and this applies to:

- metal beads and other metal jewellery (that is, bracelets, necklaces, rings, piercing jewellery, wristwatches, wristwear, brooches, cufflinks)
- components, metal parts of jewellery and imitation jewellery articles
- hair accessories

For products sold second-hand, the General Product Safety Regulations 2005 apply. These require goods supplied to be safe. See 'General product safety: distributors' for more information.

What should I do to ensure I comply?

If you are not the manufacturer or importer, you should check with your supplier that the products comply with the Regulations. For example, this could involve asking to see test certificates, or auditing your suppliers if you are a large retailer. How much you need to do depends on a number of circumstances - for example, the size of your business - but doing nothing will not be sufficient.

If you are a manufacturer or importer, you would normally be expected to have tested your products to ensure that they comply. It is recommended that a reputable test house should carry out any testing, such as one accredited by the United Kingdom Accreditation Service (UKAS).

Trading Standards

For more information on the work of Trading Standards services - and the possible consequences of not abiding by the law - please see 'Trading Standards: powers, enforcement and penalties'.

In this update

No major changes.

Last reviewed / updated: April 2024

Key legislation

- General Product Safety Regulations 2005
- assimilated Regulation (EC) No 1907/2006 *concerning the Registration, Evaluation, Authorisation, and Restriction of Chemicals (REACH)*
- REACH Enforcement Regulations 2008
- REACH etc (Amendment etc) (EU Exit) Regulations 2019

Please note

This information is intended for guidance; only the courts can give an authoritative interpretation of the law.

The guide's 'Key legislation' links go to the legislation.gov.uk website. The site usually updates the legislation to include any amendments made to it. However, this is not always the case. Information on all changes made to legislation can be found by following the above links and clicking on the 'More Resources' tab.

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