

The use of **Creosote** and **Creosote-treated Wood**

*Image courtesy of
Calders & Grandidge*

Introduction

100% Coal Tar Creosote ('Creosote') has been used for nearly 200 years to impart reliable service life to wood and has proven its usefulness even under the most challenging conditions. Applications include: railway sleepers; poles for electricity and telecommunication distribution; fencing and other critical in-ground contact uses, such as tree stakes. Reliable and detailed reports have been published on creosote which, together with experience of the performance of creosote-treated wood in service, provide confidence in its excellent qualities as a wood preservative. It is the only preservative shown as suitable for a Use Class 4 ground contact (UC4) 60 year service life in the WPA Industrial Wood Preservation Code of practice (CoP) and BS 8417 without consulting preservative suppliers.

New preservatives – typically copper-organic oil-based formulations – are starting to emerge for use with wood products traditionally treated with creosote. One such product is now authorised for commercial use in England, Scotland and Wales (GB) and wood treated with copper-organic oil-based preservatives may also be imported into GB for exterior, above ground and ground contact applications. A service life of up to 40 years for wood treated with this alternative to creosote is quoted by its manufacturer. The WPA CoP and BS8417 show where other types of treatment are also suitable as alternatives to creosote.

Use of Creosote

Creosote is authorised for sale, supply and use in GB under the **Biocidal Products (Health and Safety) (Amendment) Regulations 2022** (GB BPR) that implement an amended version of the **EU Biocidal Products Regulation** (EU BPR).

At the date of this guidance note HSE is reviewing the results of a public consultation relating to the renewal of creosote's authorisation for use in GB.

Wood may currently be treated with creosote in GB (at the date of this publication) for the following end uses:

1. **Railway sleepers and fence panels/horizontals used in highway fencing, equestrian fencing and animal security fencing** (BS 8417 Use Class 3).
2. **Overhead Electricity Poles; Telecommunication poles; Fencing posts for the safety critical uses of highways fencing, equestrian fencing and animal security fencing; Agricultural tree stakes/supports** (fruit, vineyard and hops) only when a long service life (safety critical) is required (BS 8417 Use Class 4 - ground contact but not to be placed directly in fresh water).
3. **Surface treatment of the above uses** (to allow for re- treatment of surfaces exposed by working treated wood – for example cross-cutting and boring holes).

Note that the GB and EU regulations apply to the **use of creosote** to treat wood not, apart from labelling obligations, to the **use of treated wood** – though wood treated with creosote in GB now should only be placed on the market when intended for the uses listed. Once on the market (whether treated in GB or imported) creosote treated wood may be used in GB in accordance with the UK version of the **Registration, Evaluation, Authorisation & Restriction of Chemicals (REACH) Regulation (UK REACH)**.

Under **UK REACH**, creosote-treated wood may be used in professional and industrial uses in any situation apart from those listed in the regulations (generally those uses that involve risk of frequent contact with the treated wood). The regulations also give examples of professional and industrial situations where creosoted wood may be used that include: **on railways; in electrical power transmission and telecommunications; fencing; agricultural purposes (e.g., stakes for tree support); harbours and waterways.**



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For N. Ireland (and the EU) a Commission Implementing Regulation (CIR) was published on 14 October 2022 for creosote as an active substance and provides for creosote to remain **approved as an active substance for use in wood preservatives until 31 October 2029**. Wood treated with creosote **from 30 April 2023** may only be placed on the EU market as **railway sleepers and/or poles** in those member states listed by ECHA (the European Chemicals Agency). **The current version of that list includes N. Ireland for both sleepers and poles.**

Advice to sellers/suppliers of creosoted wood

The GB and EU BPR (Article 58) requires treated articles to carry a label that includes:

- a statement that the treated article incorporates biocidal products;
- the biocidal property attributed to the treated article (for example protects against fungal decay);
- the name of all active substances contained in the biocidal products;
- any relevant instructions for use, including any precautions to be taken because of the biocidal products with which a treated article was treated or which it incorporates.

The GB and EU BPR requires that labelling shall be 'clearly visible, easily legible and appropriately durable. Where necessary because of the size or the function of the treated article, the labelling shall be printed on the packaging, on the instructions for use or on the warranty'.

Disposal of waste creosote-treated wood

Before disposal, it is good practice to consider if the wood could be **reused** or **recycled**. If so, it must only be reused in one of the permitted uses - see allowed uses under **UK REACH**, oveleaf.

When creosote-treated wood reaches the end of its service life and has to be disposed of then disposal must be in accordance with the regulations on **hazardous waste**.

Waste from domestic uses such as garden fencing may use normal domestic waste disposal procedures. Waste from commercial use must be managed according to hazardous waste regulations. Creosote-treated wood may be burned for disposal in a Waste Incineration Directive (WID)-compliant incinerator, most beneficially for energy generation - heat or power. This works best for large quantities of waste wood - call the WPA for information on WID-compliant incinerators.

Guidance on reuse, recycling and waste disposal is available in Guidance Note [WPA TW 14: UK guidance on the classification of treated wood waste](#).

Creosote for DIY

Creosote is not permitted for DIY use.

Alternative DIY treatments are available - it is advised to check suitability of each product by reading the label or point of sale literature.

This Guidance Note is not legal advice. Companies and individuals are advised to seek advice from their own legal advisors if they are in any doubt as to the application of the regulations to their own situation. The WPA, its employees and officers cannot be held liable for any loss or liability arising from reliance on this guidance document which is nevertheless offered in good faith.

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