

Counterfeit Electrical Products

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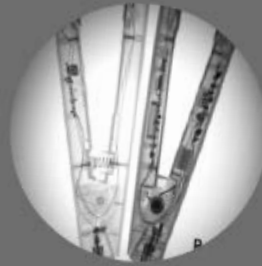
Product Safety Manager
Electrical Safety First



**Electrical
Safety First**
The UK's electrical safety experts

A shocking rip off

*The true cost of counterfeit
electrical products*



www.electricalsafetyfirst.org.uk

A growing issue

- UK market for counterfeits thought to be more than £1.3 billion pounds a year.
 - ...of which estimated £900 million helps fund organised crime
- The global economic impact of counterfeiting - may account for as much as 7% of world trade
- 64% purchased online
- Social media – increasing 15% a year



Fake?

- A level of sophistication – Modern counterfeits can be indistinguishable from the genuine articles without thorough investigation

Genuine



Fake



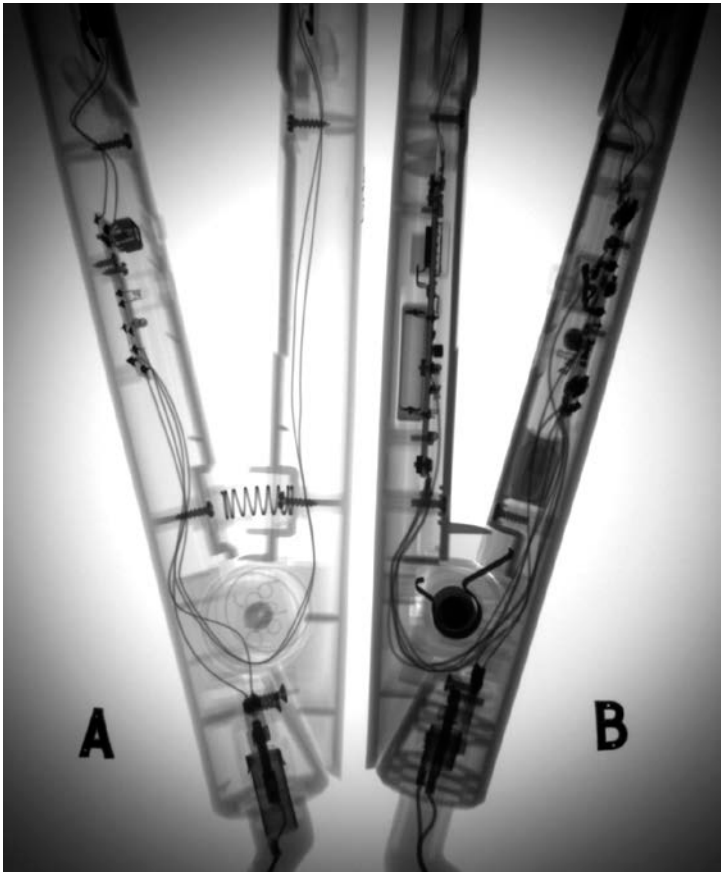
Genuine



Fake



Which one is fake?



Drivers

- Cost!

£15-20



Photo (Original appliance)

£1



Photo (Fake)



- Note: Counterfeiters are now even pricing their products at close to the RRP !

- Consumer demand



- Lack of public awareness of potential consequences - Over a million people have knowingly purchased a counterfeit product in the last year

Not just online and in markets...



Market surveillance

- Nearly two in five interventions at ports and borders identified as 'unsafe or non-compliant'



- LED lamps border project
 - 64% unsafe or non-compliant

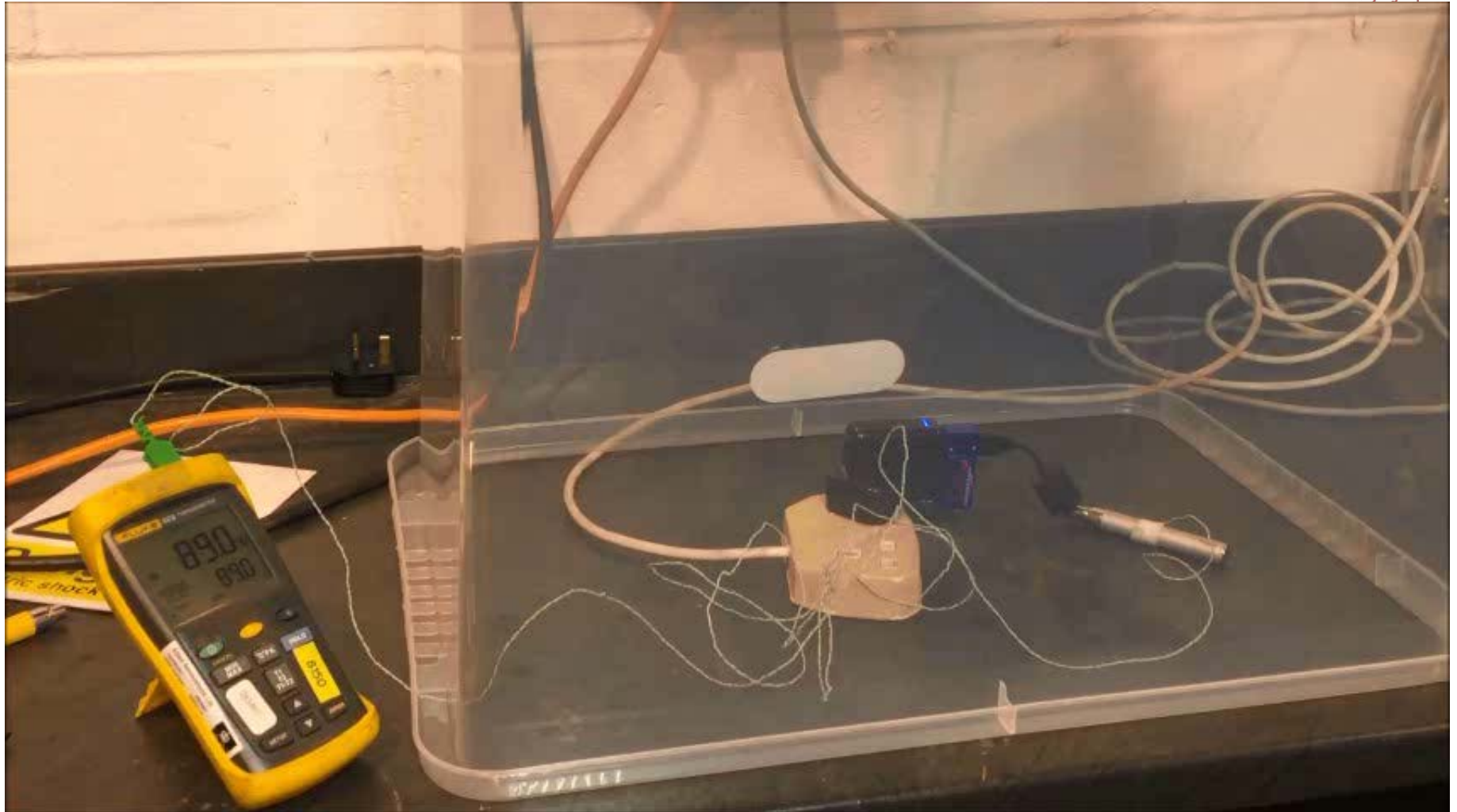




CE and certification marks



A screenshot of an Amazon product page for an e-cigarette charger. The page title is "New Inspired Vapour 1100mAh MT3 EVOD PURPLE E Shisha Electronic Pen Rechargeable Rechargeable eEvod Bottom Refill USB Charger CE SGS ROHS Certified". The product image shows a purple e-cigarette with a black USB charging cable. The text "CE SGS ROHS Certified" is circled in red. Below the product image, it says "Available from these sellers." and "1 new from £6.65". There is also a note: "Age Verification Required on Delivery eCigarettes, starter kits and accessories are not for sale to persons under 18 years of age. Proof of age and a signature may be required on delivery." At the bottom, there is a section titled "Customers Who Bought This Item Also Bought" with several product thumbnails.



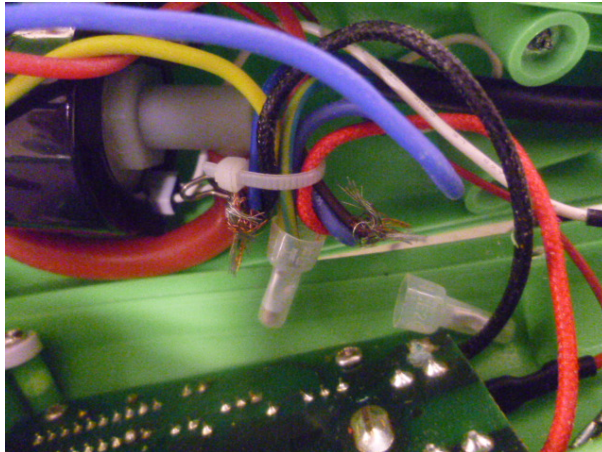
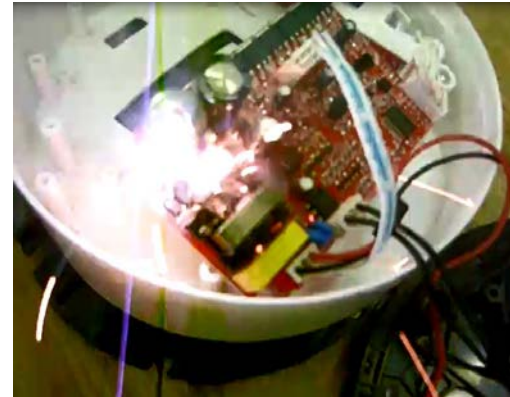
Testing and evaluation

A number of counterfeit products were sourced:

Hair straighteners
Mobile phone chargers
Food blender
Bladeless fan
Steam mops
Battery Chargers

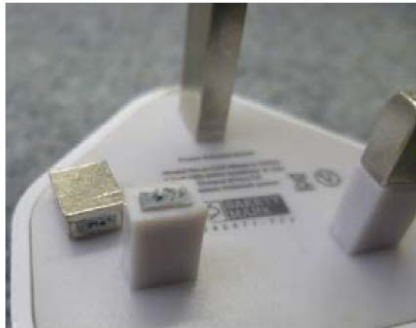
Test and investigation results

Examples of faults found

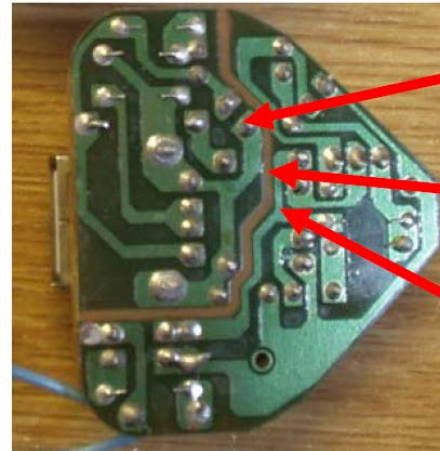


Test and investigation results

Examples of faults found



Plug pin fails strength test

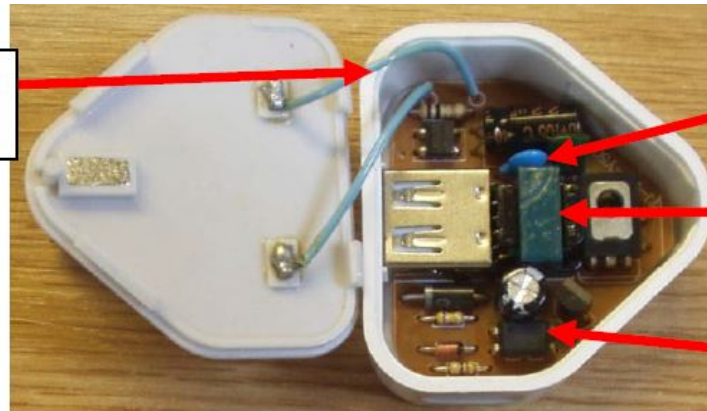


“Accessible” circuitry

1mm Cr between live & accessible

“Live” circuitry

Unsecured live wiring with single insulation



Unapproved capacitor

Unsafe transformer

Unapproved opto-coupler

Solutions?

- **Manufacturers and retailers**
 - Work with enforcement agencies – share intelligence and expertise
 - Components legitimate and traceable
 - More responsibility for online marketplace services
 - Promote safety and quality benefits of genuine products
- **Government**
 - Strengthen enforcement and market surveillance resources
 - Review of online controls
 - Promote guidance for suppliers and distributors – SMEs
- **All**
 - Public education – remove consumer demand
 - Provide consumer advice and guidance – enable informed purchasing

Example - Plug pin gauge

- Simple tools can make a lot of difference
- Low cost solutions which make it easier for enforcement personnel to confidently make quick decisions can have a big impact

