Consumer Safety on Online Marketplaces
The Evidence and Impact

Electrical Safety First

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1. Executive Summary

1.1. About Electrical Safety First

Electrical Safety First is a consumer safety charity dedicated to reducing the number of deaths, injuries and accidents caused by electricity. We do this by campaigning on behalf of consumers and electrical trade professionals to improve safety regulation and make sure messages are appropriate, up-to-date, and well communicated. We also work hard to raise awareness of electrical risk in the home. We work with Government, NGOs and Industry as the leading campaigning charity and technical authority on electrical safety.

1.2. Overview

Online marketplaces are becoming an increasingly popular shopping destination. However, the safety of products sold on these platforms is of concern. As such, this report looks at the evidence and impact of unsafe electrical products being sold on online marketplaces. The supporting report **Consumer Safety on Online Marketplaces: The Need for Change** delves into the legislative framework and looks at how this can be improved to protect consumers.

Electrical Safety First has been monitoring the problems caused by the sale of unsafe electrical products on online marketplaces for several years. This is a growing problem that places a significant number of consumers at risk; Electrical Safety First's investigations provide detailed evidence of this risk across a range of online platforms.

In 2016, Electrical Safety First undertook an investigation into counterfeit (and potentially unsafe) chargers. A popular purchase from online marketplaces, this investigation found 98% of the chargers failed safety tests.

More recently, in 2019, Electrical Safety First bought and tested electrical products from online marketplaces, with the majority failing safety tests. Further research by Electrical Safety First for ITV Tonight and BBC Watchdog has found similar problems.

Electrical Safety First's investigations have also exposed recalled electrical products being listed on online marketplaces. Worryingly, Electrical Safety First has found that the sale of unsafe electrical products has spread to social media too.

Electrical Safety First's investigations illustrate the risks posed by the sale of unsafe electrical goods on online marketplaces. The findings of these investigations are symptomatic of a broader issue, and it is evident that a great number of unsafe electrical goods are being sold on online marketplaces.

In addition, Electrical Safety First has undertaken a range of consumer research to gauge consumer attitudes towards online marketplaces. This research found that consumers are increasingly using online marketplaces and have a high level of trust in these platforms.

Given the abundance of research that shows that unsafe electrical goods are being sold on online marketplaces, combined with consumers own experiences, it is clear that consumers are unwittingly purchasing unsafe goods on online marketplaces. This places consumers, their families, and their homes at risk.

To find out more about Electrical Safety First's recommendations on how best to protect consumers, you can read our supplementary report **Consumer Safety on Online Marketplace: The Need for Change.**

To discuss this report in more detail, contact:

policy@electricalsafetyfirst.org.uk

2. Findings

2.1. Electrical Safety First Investigation – Imitation Chargers

Electrical Safety First tested 64 counterfeit and imitation Apple chargers bought from both online marketplaces and smaller independent retail outlets. 63 of the chargers failed one or more of the mechanical and electrical tests. This amounts to a **98% safety test failure rate.**

These chargers were unsafe, with the risk of them overheating, catching fire, and delivering a potentially lethal electric shock to consumers while in normal use.

A 'progressive' screening approach was taken whereby each sample had to meet a hierarchy of safety criteria to progress to the next stage in the test schedule.

53 chargers (83%) failed to meet the required markings. Over half (64%) were fraudulently marked with safety approval markings, and 45% were falsely marked with the international energy efficiency symbol V (level 5).

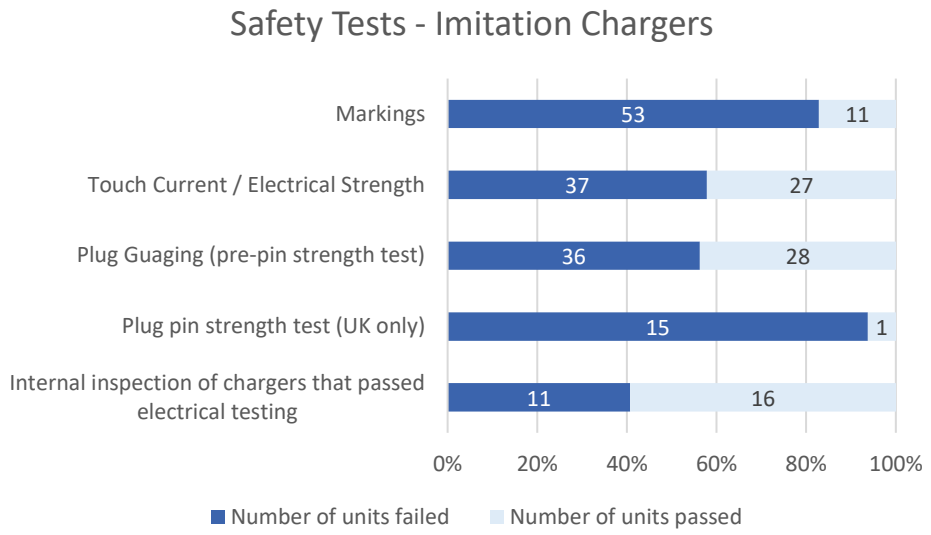
37 chargers (58%) failed the electric strength test. A failure of either of an electric strength or touch current tests is an indication of inadequate insulation inside the product, which in normal use could become further compromised and pose a severe risk of electric shock to the user.

36 chargers (56%) failed the plug gauging test. The plug gauging test is required to ensure that the size, alignment, and disposition of the plug pins will not impose undue stress on socket outlets.

15 chargers (94%) failed the plug pin mechanical strength tests. If a plug pin is not sufficiently strong, there is a danger that it could break off inside a mains socket with a resultant risk of electric shock from an exposed live pin.

16 UK chargers that passed both the electric strength test and internal inspection were subject to a plug pin mechanical strength test. Only one charger passed the mechanical tests and subsequently managed to fit the pin gauge.

Many of the chargers that failed the test suffered severely bent and twisted pins and for four samples, the pins snapped off. Broken pins could be left exposed inside the mains socket, again representing a significant risk of electric shock.



2.2. Electrical Safety First Investigation – Online Marketplaces

Electrical Safety First tested 15 products found on Amazon Marketplace, eBay and Wish.com in a specialist test laboratory. This included a range of popular electrical products, such as hair straighteners, phone chargers, travel adaptors, and laser hair removers.

14 out of 15 (93%) of the products purchased failed tests against UK safety standards. Test failures ranged from non-compliant markings to product safety failures. These failures posed a risk of serious electrical shock and fire to the user.

For instance, a single-port charger, bought on Wish.com, was fitted with no protective devices. This left the product at risk of internal rupturing, which could result in an explosion were the product to fail. Similarly, a modelling hair comb, bought via Amazon Marketplace, exhibited a fire risk to the user. This was due to a non-compliant plug. Current safety standards meant that the sale of this product was illegal in the UK. Nonetheless, the product was still advertised and sold via Amazon Marketplace.

This test sample is symptomatic of a wider issue on online marketplaces. The lack of regulation on online marketplaces means that there is a scourge of unsafe electrical goods being advertised and sold on these platforms. These unsafe electrical goods pose a risk to consumer safety.

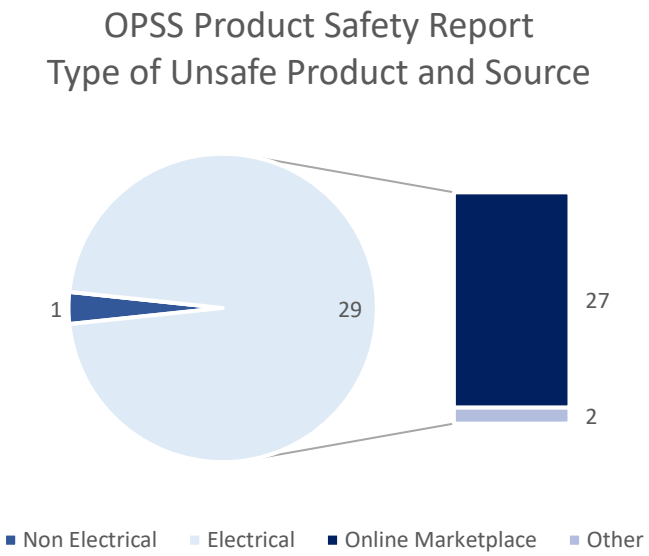
2.3. OPSS Product Safety Report

In January 2021, the Office for Product Safety and Standards' (OPSS) begun publishing weekly product safety reports. These reports relate to unsafe and recalled products that pose a risk to the health and safety of consumers.

Electrical Safety First's analysis of the first three reports evidences the true extent of the problem related to the sale of unsafe electrical goods on online marketplaces. 29/30 of the unsafe products listed in the first three reports were electrical products. 27/29 of these unsafe electrical products were listed on online marketplaces[i].

More detailed analysis[ii] of OPSS' product safety reports[iii] to April 2021 found that the **majority (57%)** of unsafe products reported were electric. Of these, **80% were available on an online marketplace,** such as eBay, Amazon Marketplace, or Wish.com.

This analysis demonstrates the scale of the problem regarding the sale of unsafe electrical products on online marketplaces. Unsafe electrical products form the majority of unsafe products reported by OPSS. Coupled with the fact that unsafe electrical products pose a unique risk to consumer safety, this is cause for concern.

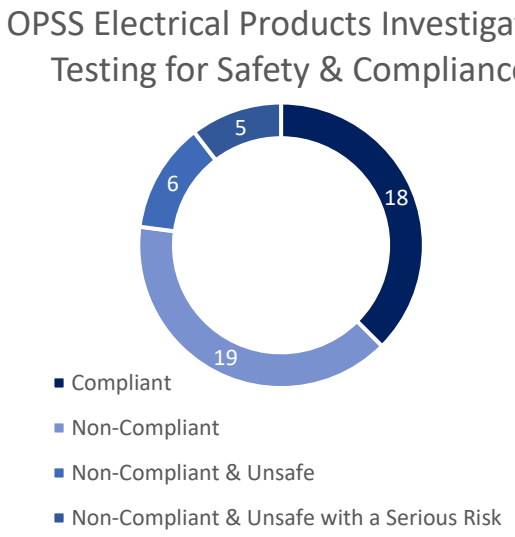


2.4. OPSS Investigation

As part of an investigation, OPSS tested and purchased 48 electrical products from online marketplaces. The investigation focussed on popular household items such as hair dryers, hair straighteners, electric shavers, electrical blanket, and kettles[iv].

The products were submitted to test laboratories and tested for compliance with the Electrical Equipment (Safety) Regulations 2016. Of the 48 electrical products, **30 (62.5%) were found to be noncompliant[v].** 11 of these noncompliant products were unsafe, equating to 23.0% of the overall sample. Five of the unsafe products posed a serious risk, equating to 10.4% of the overall sample.

This investigation was based on a random sample of products purchased by OPSS, targeted at the most frequently used electrical items. It is concerning, therefore, that the majority (62.5%) of the electrical products tested did not comply with UK safety regulations. This is especially given that these electrical products were readily available to purchase on online marketplaces.

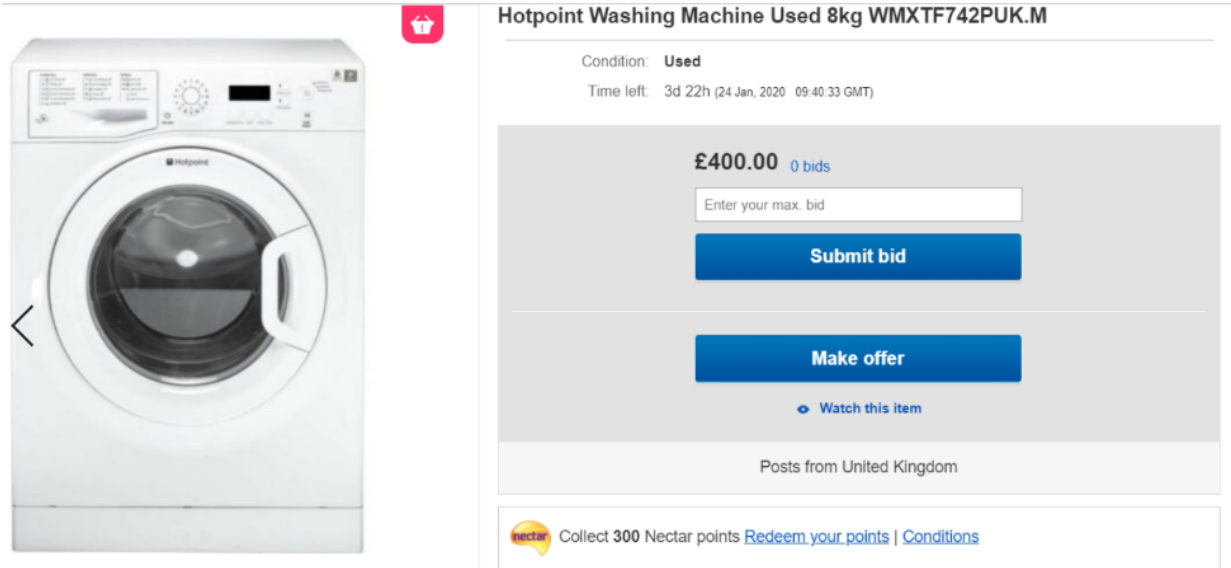


2.5. Recalled Products

2.5.1. 2020 Investigation

As part of an investigation, Electrical Safety First listed two adverts for Hotpoint washing machines on eBay and Facebook Marketplace. The listings included model numbers which were subject to recalls based on the recall list published by Hotpoint. The investigation sought to assess the systems and process in place to prevent recalled products being advertised and sold.

The model number WMXTF 742P UK.M was used in the description of a listing on eBay alongside the Hotpoint brand name. The model number WMAQC 741P UK as well as the Hotpoint brand name was used in the title of the listing for Facebook Marketplace also. Both models, which had flawed door-locking systems, could overheat. As a result, both were subject to recall notices and, therefore, should not have



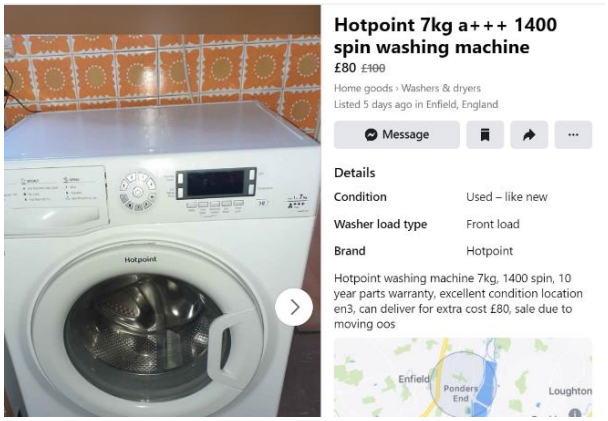
been listed for sale. Whilst eBay removed the advert after three-and-a-half days and informed the seller that the product may be subject to a national recall, Facebook Marketplace did nothing.

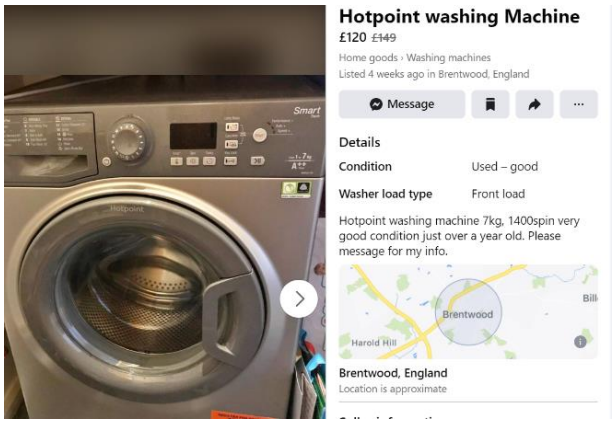
2.5.2. 2021 Investigation

A more recent investigation by Electrical Safety First has found that the issue of recalled electrical products being sold on eBay and Facebook Marketplace continues.

Electrical Safety First identified and reported three recalled Hotpoint washing machines for sale on eBay. Cross-referencing the serial numbers, WMBF 742P UK.M (two) and WMFUG 742P UK, these washing machines were all listed on Whirlpool's recall list. Electrical Safety First reported the listings to eBay. Of these, one was removed from sale, one sold by bid and the third continues to be listed.

The investigation also found two recalled Hotpoint washing machines for sale on Facebook Marketplaces. Cross-referencing the serial numbers, WMFUG 742P UK and WMAOD 743P UK, both washing machines were listed on Whirlpool's recall list. Electrical Safety First reported these listings to Facebook. Both continue to be listed. Of these, one had been listed for over four weeks.





These washing machines all have potentially faulty door locking mechanisms. This means that they could catch fire due to overheating during the washing process. These machines present a serious fire risk to the consumer and, therefore, should not be sold on online marketplaces. The fact they continue to be advertised and sold on online marketplaces places consumers at risk.

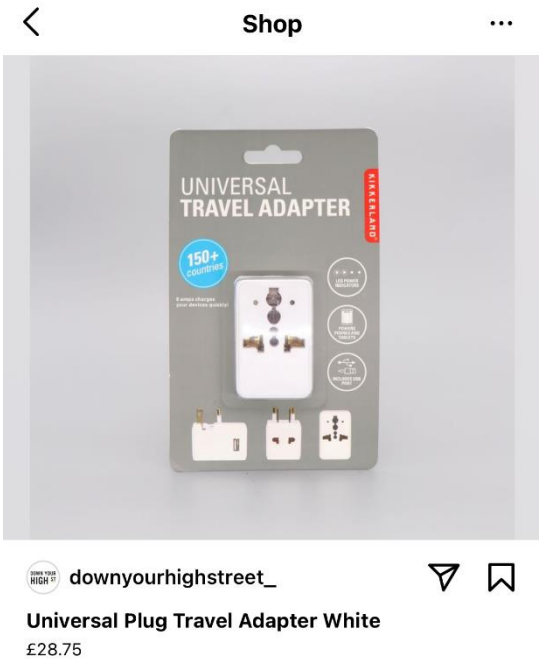
Additionally, whilst eBay allows buyers to report products as 'recalled', Facebook has no similar facility. This makes it difficult for consumers to report recalled products listed on Facebook Marketplace.

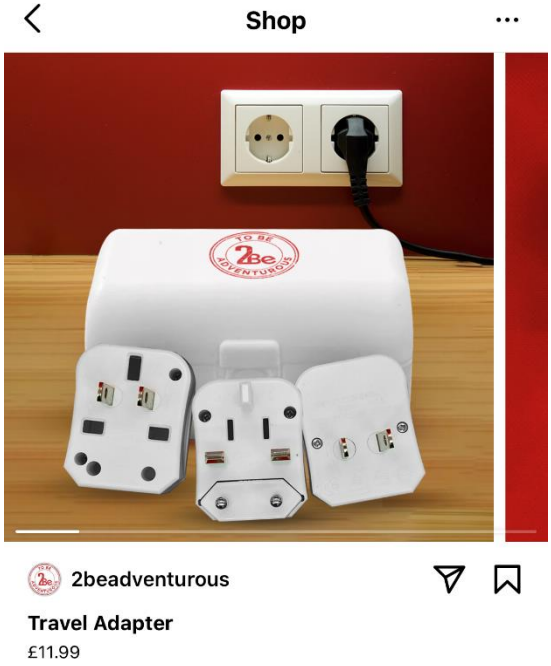
2.6. Social Commerce – Instagram

Given the advent and increasing popularity of social commerce, Electrical Safety First undertook an investigation into the advertisement and sale of unsafe electrical products on Instagram Marketplace.

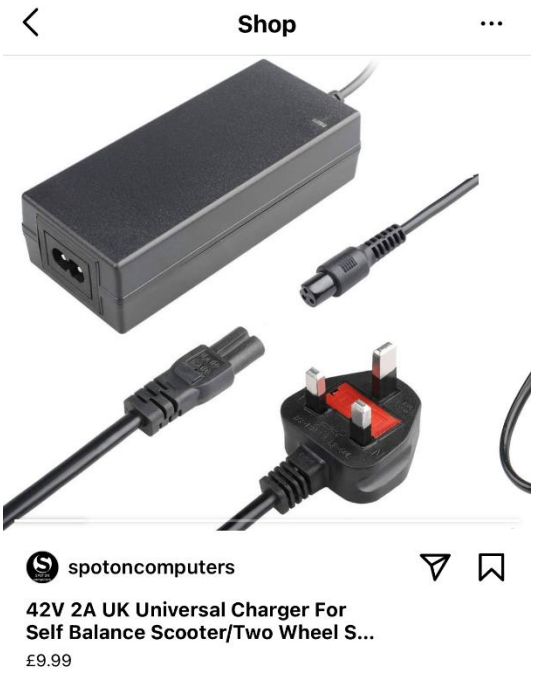
The investigation found several unsafe electrical products listed on Instagram Marketplace. This is a particular concern given the popularity of Instagram Marketplace amongst younger people – and the high

levels of trust that people have in both social media platforms and online marketplaces. Three travel adaptors were identified as being unsafe– with all posing a risk of electric shock. The first, listed as a *Universal Plug Travel Adapter*, poses a risk as the live pins of the UK plug portions are too close to the





outside edge of the adaptor. As such, the adaptor could cause an electric shock.



The second, listed as a *Travel Adapter*, was identified as having no shutters on the socket live contacts. The third, listed as a *UK Plug Electricity Travel Adapter to UK/US/EU/AU Converter,* has no shutters on the socket live pins and the live plug pins are too close to the outside edge of the adaptor. As such the plug could be inserted into the socket with one live pin exposed to touch. Both adaptors could also cause an electric shock.

Additionally, the investigation identified an unsafe hoverboard charger. This was supplied with a power lead fitted with a non-approved plug. The earth pin is sleeved which is not permitted in the safety standard. Moreover, the charger had a counterfeit plug which is very likely to be fitted with a counterfeit fuse.

These findings are symptomatic of a wider issue on Instagram Marketplace and social commerce more generally. Consumers have high levels of (misplaced) trust in products they purchase through social commerce platforms. However, as this investigation shows a significant number of products sold on social commerce platforms are unsafe. These products have the potential to cause electric shocks or fire – posing a serious risk to consumers.

As social commerce continues to develop and becomes increasingly popular, the risk to consumers is likely to increase. Social commerce creates new opportunities to facilitate transactions between buyers and sellers. However, it is vital that only products which are safe can be advertised – and that consumers are not able to buy unsafe products.

3. Impact

3.1. Consumer Survey

A significant number of consumers have bought unsafe electrical goods on online marketplaces: Consumer research conducted for Electrical Safety First found that nearly 1/4 of all consumers had bought a counterfeit electrical product when shopping online[vi].

In the past year alone, 28% of those consumers who had bought a counterfeit, had bought the counterfeit from an online marketplace. Online marketplaces are the most likely place for consumers to have bought a counterfeit good. By contrast, 21% had bought a counterfeit from an online retailer or discount store and 18% had bought a counterfeit in person from a retailer. This demonstrates that online marketplaces pose a unique risk in terms of the sale of unsafe and counterfeited products. This is likely due to the lack of a robust legislative framework for product safety on online marketplaces – making it far easier for unsafe products to be listed and go unchecked.

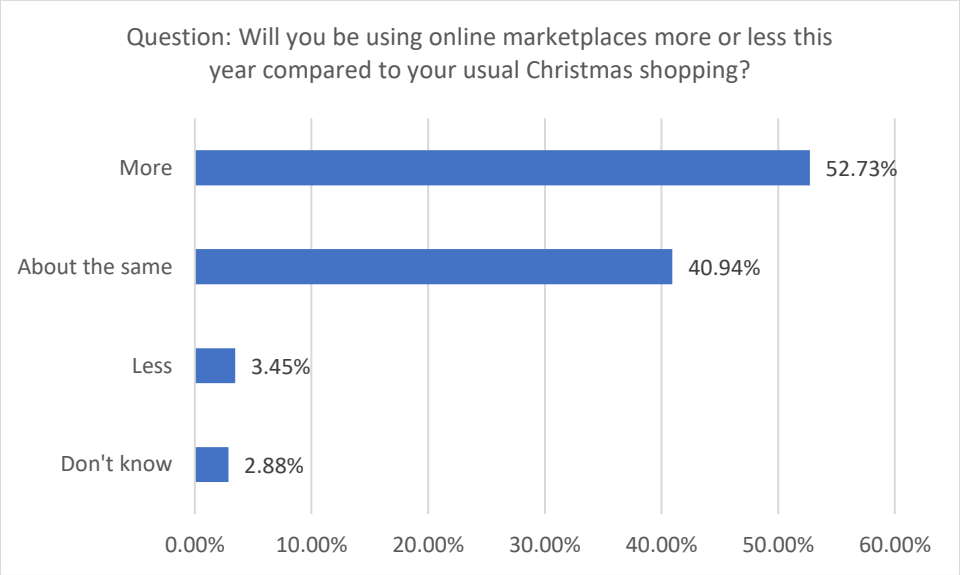
Despite the numbers who have bought unsafe electrical goods on an online marketplace, consumers assume products are safe: A survey commissioned in October 2020 found that 92.23% of consumers thought that the electrical products were safe[vii]. As such, consumers are unwittingly purchasing unsafe electrical goods from online marketplaces, assuming that product safety is guaranteed by the producer or the online marketplace. This is not the case.

Consumers have a high level of trust in online marketplaces: A January 2021 survey found that 18% of consumers believed that if an online marketplace became aware that a product being sold was counterfeit or substandard, the online marketplace would contact anybody who had purchased[viii]. This is not the case.

The survey also found that 20% of consumers believed that if an online marketplace became aware that a product being sold was subject to a recall or safety notice, the online marketplace would contact anybody who had purchased one[ix]. This is not the case.

It is evident that consumers have a misplaced trust in online marketplaces. Whilst consumers assume online marketplaces are ensuring product safety, online marketplaces take no such responsibility when products are sold on their platforms.

Consumers are increasingly buying from online marketplaces, and this has accelerated due to Covid-19: When asked 57.93% of consumers planned on doing their Christmas shopping in 2020 on an online marketplace. As part of the same survey, 59.06% of consumers said they intended to use online marketplaces because it was safer than the high street during the Covid-19 pandemic, with 52.73% using online marketplaces more than in 2019[x]



Consumers are more likely to purchase small electrical items on online marketplaces: A further survey commissioned for Electrical Safety First found that in the last 12 months, 42% of adults have bought an electrical accessory on an online marketplace (or equivalent). By contrast, 31% had bought a small electrical appliance and 18% had bought a large electrical appliance on an online marketplace[xi].

3.2. Case Study – Wish.com

A household in Cornwall experienced problems with a kettle bought from Wish.com. The kettle had a non-UK compliant plug. This resulted in the adapter melting into the wall; in different circumstances, this could have resulted in a fire – causing risk to people and property.

As a follow up to this case study, Electrical Safety First carried out safety tests on a range of electrical products for sale on Wish.com as part of an investigation with BBC Watchdog.

The products tested as part of the investigation included:

- a scooter charger with an illegal clove-shaped plug

- an extension lead that can cause electric shock
- a hair dryer with an illegal clove-shaped plug
- a travel adaptor lacking safety shutters, leaving internal live components exposed
- hair clippers with a substandard adaptor
- a car-battery charger with an illegal clove-shaped plug

However, despite being found to be unsafe, products that could cause electric shocks or fires remain for sale on Wish.com despite being highlighted in a BBC Watchdog investigation. Hair clippers and a hair dryer were among items flagged on Wednesday. They are still available on Wish's site[xii].

A broader investigation by Electrical Safety First has unearthed yet more potentially deadly electrical goods for sale across Amazon Marketplace, eBay and Wish.com.

In a snapshot investigation, the Charity found almost 70 listings of visually non-compliant electrical products for sale including hoverboard chargers, kettles, travel adaptors, hairdryers and extension leads.

During this investigation, the Charity also monitored the number of units sold of each item where this information was publicly available. Of those items sold via eBay and Wish.com the Charity estimates that a minimum of around 22,000 potentially dangerous electrical products may have been sold from these listings alone. Amazon Marketplace does not inform consumers of how many units of a single product listing have been sold to date.

Products were analysed from the images used to advertise them and considered to be obviously substandard that they are illegal for sale to UK consumers.

Serious defects found by Electrical Safety First included hoverboard chargers, notorious for causing fires, fitted with illegal plugs that pose an electrocution risk to the user. These products were particularly prevalent on Amazon Marketplace whilst one even featured as the number one best seller during the time of the investigation.

Other safety flaws discovered included travel adaptors missing vital safety features designed to prevent the user coming into contact with the mains power supply. Some of these items sold over 2,000 units each, per listing.

Kitchen appliances including kettles were discovered being sold with EU plugs and offered with travel adapters for permanent use, posing a significant increase in electric shock and fire risk. Products sold to UK consumers are legally required to be fitted with an appropriate plug or fitted converter plug. In this instance this listing would be deemed illegal under product safety regulations. More than 140 units of this kettle were sold via eBays UK site.

3.3. Case Study – Linda Merron

The death of Linda Merron in 2015 is a tragic example of the risks posed by the sale of unsafe electrical products on online marketplaces. Linda died in a fire that begun overnight, whilst she was asleep in her home in Swansea.

Mid and West Wales Fire Service identified the source of the fire as a ‘faulty electrical item in the property’. It later transpired that the source was a faulty air purifier.

Linda had bought the air purifier for £90 from a seller on eBay. The product was imported from China. Faults within the air purifier meant the product was unsafe. caused it to ignite, causing a fire which spread through Linda's home.

Linda's death illustrates why more robust measures are required to regulate the sale of unsafe electrical products on online marketplaces. Consumers should not be able to buy unsafe electrical products from online marketplaces, and the current situation cannot be allowed to continue.

Following Linda's death, the resolute commitment of Parliamentarians to improving product safety and ensuring consumers are safe from the sale of unsafe electrical goods, resulted in the creation of the All-Party Parliamentary Group on Online and Home Electrical Safety. The Group has canvassed to raise awareness of the issues posed by the sale of unsafe electrical goods on online marketplace. This has included a number of Parliamentary debates, speeches and questions, to ensure the issue is on the Government's agenda and to achieve legislative change.

3.4. Case Study – Rachel Kent

Rachel Kent, a 40-year-old, mother-of-two from North Wales is all too familiar with the risks posed by the sale of unsafe electrical goods on online marketplaces. A fire, believed to be caused by a laptop battery bought on an online marketplace, broke out in Rachel's home. The fire caused damage to Rachel's property, and could have placed her and her family in harm's way:

"It was about 10.30am at night, I was at home in my kitchen about to take my two dogs for a walk. My laptop was on a hard table, charging for a few hours. I heard a very loud crackle and 'bang' from the laptop. Panicking, I fled into the garden, taking my dogs with me and looked in horror to see the laptop go 'bang' again and catch fire, spreading along the table.

I was terrified by what was happening and called 999 and North Wales FRS crews arrived incredibly quickly and extinguished the fire, saving many of my possessions despite some serious damage to the table and the wall. Luckily, my two kids were staying at their grandmother's that night but if they'd been in the house at the time the fire would have been between them and myself which is absolutely horrible to think about. My pet dogs also had a lucky escape, being down in the kitchen with me at the time.

I was told it was the battery of the laptop that was at fault. I'd bought the replacement battery from Amazon through a third-party seller after the original battery had died. The experience has taught me not to buy electrical products from online marketplaces again – I'll be sticking to reputable retailers."

Damage to the laptop caused by the battery.

Damage to Rachel’s property from the fire.

[i] https://www.gov.uk/guidance/product-safety-database-unsafe-products
[ii] Electrical Safety First's analysis based on first 14 OPSS Product Safety Reports (https://www.gov.uk/guidance/product-safety-database-unsafe-products).
[iii] https://www.gov.uk/guidance/product-safety-database-unsafe-products
[iv] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/941095/opss-delivery-report-2019-2020-annex-product-safety.pdf
[v] https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/941095/opss-delivery-report-2019-2020-annex-product-safety.pdf
[vi] Consumer research conducted by Censuswide on behalf of Electrical Safety First
[vii] Censuswide survey conducted on behalf of Electrical Safety First in October 2020.
[viii] YouGov survey conducted on behalf of Electrical Safety First in January 2021.
[ix] Ibid.
[x] Censuswide survey conducted for Electrical Safety First in December 2020.
[xi] YouGov survey conducted for Electrical Safety First in January 2021.
[xii] https://www.bbc.co.uk/news/technology-55934656