



Case studies: Li ion battery failures

E cigarette batteries

Background

- 2 individuals, Vaper A and Vaper B, purchased e cigarette devices and components from the same store, in early 2016.
- Both purchased e cigarette devices, chargers and batteries. They were advised that the components were compatible with one another.
- Vaper A and Vaper B selected a popular brand of batteries, 18650 size. Both were advised to buy two batteries, as a single battery was unlikely to last a whole day.

Background

- Vaper A and Vaper B both say:-
- The batteries were provided with no packaging;
- No particular verbal warnings or instructions were provided at the time of purchase;
- They were specifically advised to carry the spare battery with them, but no advice was given as to the method of carriage.

Background

- No problems for Vaper A or Vaper A initially.
- The products worked.
- Both Vaper A and Vaper B carried the spare batteries to work in their pockets.
- Swapped the batteries over when charge ran out.
- Charged both up at night.

Failure



Injuries

- 8-9% surface burns to legs and hands
- 0.5% full thickness, 1% deep dermal
- Skin debrided with tweezers, blistering 'deroofed'
- Wound 'scrubbed vigorously' under gas and air.
- Left with significant hypertrophic scarring.

Legal action

- Both Vaper A and Vaper B submitted letters before action to the seller.
- Alleging breach of the Consumer Rights Act 2015 through the provision of unsafe products.

The response

- ‘loose change was present in his pocket and it was this contact with the loose battery that resulted in the damage and subsequent injuries’

The response



The response

- ‘We have sufficient evidence that the cause was your client’s negligence in carrying this battery against *worldwide advices*’

Worldwide advices

Attentions

1. Avoid shorting the battery: do not mix batteries with metal stuff together(ESPECIALLY DO NOT PUT ANY BATTERIES IN YOUR POCKET), it does happen big problem because of this kind of mistake

Is the seller liable?

- Consumer Rights Act 2015
- S.9(1) Every contract to supply goods is to be treated as including a term that the quality of the goods is satisfactory.
- (2) The quality of goods is satisfactory if they meet the standard that a reasonable person would consider satisfactory, taking account of...
- (d) safety;
- (e) durability.

Is the seller liable

- The level of safety required is that which ‘a reasonable person’ would expect.
- Were the risks obvious?
- Were reasonable steps taken to mitigate the risks?
- What warnings were provided?

Issues

- Confusion between AA batteries and Li ion batteries
- Warnings?

Outcomes

- Serious injury to the consumer
- Loss of earnings
- Expensive legal claim against the seller or manufacturer
- Reputational damage – website comments, social media, national press.