

MSF: Lithium battery contents in eyes

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The Marine Safety Forum has published a safety flash regarding an incident in which a crewman was splashed in the eyes with material from a Lithium battery.

What happened?

The incident occurred offshore whilst the ship's Electro Technical Officer (ETO) was engaged in the repair of a ship's instant reaction electronic welders mask. The tablet style lithium ion battery to the mask needed replacing and due to the compact nature of the equipment it was considered that this could only be done by soldering connections on to the new battery. The original mask battery was soldered by machine soldering. The repair required manual soldering for obvious reasons. The first connection was made successfully and whilst soldering the second connection the lithium battery overheated and popped causing the battery contents to spray out into the ETO's eyes.

Personnel nearby reacted rapidly and correctly applying copious quantities of water to the injured person's eyes. There was no permanent harm to the injured person's eyes.

The root causes of the incident were:

- Failure to use personal protective equipment (PPE);
- Inadequate time was allowed between soldering operations for the battery to cool down causing it to over-pressurise and fail resulting in the injury;
- Inadequate work planning or programming – the work was seen as 'everyday' which resulted in an inadequate risk assessment.

Members should be aware that IMCA provides a useful series of safety prompt cards, one of which is ['Protect your eyes'](#).

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The effectiveness of the IMCA Safety Flash system depends on the industry sharing information and so avoiding repeat incidents. Incidents are classified according to IOGP's Life Saving Rules.

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