

TECHNICAL BULLETIN

CHANGES TO THE UNDERWATER KINETICS 3AA CPO TORCH

11TH DECEMBER 2019

Dear Valued Customer,

You may be aware that recently there has been a delay in the supply of Underwater Kinetics 3AA CPO torches. This delay was due to a certification update which include a series of revisions in the standard for intrinsic safety, as well as a design update. The update included keeping pace with changes in LED technology.

The changes include:

- 1. A switch of test laboratories from Intertek (ETL) to Underwriters Laboratories (UL) for testing and issuance of the test certificate. Both ETL and UL are international notified bodies and are highly regarded for their ability to test to the UL913 standard for intrinsic safety.
- 2. A change in standards occurred which required an update in the certification of the 3AA CPO light. The original certificate was issued under UL913 edition 5. This had to be updated to UL913 edition 8, as the edition 5 certificate was being phased out.
- 3. Several design changes were required to comply with UL913 edition 8, as well as the new release of the ATEX standards in Europe.
- i. The plastic enclosure was required to be "static dissipative" so that the light could not accumulate a static charge and cause a spark in a hazardous location.
- ii. The LED was updated to latest level of efficiency so that a brightness increase could be achieved without a noticeable increase in power consumption.
- iii. The standard required that all electrically conductive elements be separated by 0.5 mm of insulation. The battery cans are made of electrically conductive steel and covered with a layer of plastic for insulation. As the thickness of the plastic insulation did not add up to 0.5 mm, the two battery cells are now encased in a plastic insulative tube.
- iv. In order to maintain the outer dimensions of the body of the flashlight the metal liner of the case has been removed in order to make room for the plastic tube.
- 4. The text of the certification on the torch body is slightly revised:

The original ETL text read:

UK 3AA ELED CPO-AT UNDERWATER KINETICS, POWAY, CA USA

CL I,II, III DIV 1 GROUP A-G, T4 Exia CONFORMS TO UL STD 783, UL STD 913, & CERTIFIED TO CSA STD C22.2 No. 157.
WARNING: RISK OF IGNITION -DO NOT OPEN IN HAZARDOUS LOCATIONS. CHECK INSTRUCTIONS BEFORE USE. DO NOT MIX BATTERIES OF

DIFFERENT MAKE OR OLD AND NEW. USE ONLY 3 AA 1.5V NERGIZER E91, DURACELL MN1500, OR RAYOVAC 815 BATTERIES

The new UL text reads:

UNDERWATER KINETICS, POWAY, CA USA

INTRINSICALLY SAFE (SECURITE INTRINSEQUE)

Ex ia CL I, DIV 1 GP A-D T4, CL II, DIV 1 GP E- G CL III, DIV 1, -20<Ta<+40°C

WARNING: RISK OF IGNITION – DO NOT OPEN IN HAZARDOUS LOCATIONS. CHECK INSTRUCTIONS BEFORE USE. DO NOT MIX BATTERIES OF DIFFERENT MAKE OR OLD AND NEW. USE ONLY (UTILISER SEULEMENT) 3 AA 1.5V ENERGIZER E91, DURACELL MN1500, RAYOVAC HIGH ENERGY

Both are both Class I, II, III Division 1 groups A-G, meaning that there is no change to the environments that the torches are certified to operate safely in and the UL torch is marginally lighter than the ETL torch.

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Please note that with immediate effect, all Underwater Kinetics 3AA torches will be supplied as per the changes outlined above. We apologize for the late circulation of this technical bulletin, but we were not aware that the changes to the internal components had already been made by the manufacturer.

If you have any queries, please don't hesitate to contact your area sales manager or Paul Clark at paul@pacfire.com.au.



