

# Leak Insure

By Alex Mustard

If there is one thing all underwater photographers fear, it's the f-word. I have always thought flood is a particularly apt choice of noun. We could have used leak, seep or soak, but flood implies a catastrophe on a biblical scale. Quite correctly.

Floods are inevitable for those of us who choose to take cameras into the ocean. The old saying goes: "Nikonos photographers can be divided into those who have flooded their camera and those that will!" And as cameras have become ever more reliant on electronics, so the consequences have become more dire. Every Nikonos III owner will delight in telling you, that if you flood a completely mechanical camera it can be washed out in fresh water and used again. I always feel I've missed out by not actually flooding my Nik 3. Anyway, with modern cameras, even minor floods can trigger gremlins.

Scared though we are to mention the f-word, floods are not common. My cameras spend a fair bit of time in the water, and I have never lost an SLR (film or digital) to the sea, despite considerable hours of photography. But I probably will one day, no doubt my first morning with

the new Nikon D4x!

Experience has shown me that almost all floods, and I've seen plenty, result from operator error. The best medicine is preventative. I have never had flood insurance on any camera I have owned, but I always make sure my housing is correctly prepared for a dive (perhaps as a consequence?).

Floods generally fall into two categories. The worst are gushing floods, where water pours into the housing instantly quenching electronic life. These floods are almost always caused by user error: o-rings not seated properly and pinched, ports or housing backs not attached properly, or systems getting a jolt or rotation during handling. The danger moment is the first seconds of the dive. I always spend this critical period with my housing port down, me staring up into the port for droplets. The other time for catastrophic floods is in rinse tanks after dives. Whether it is the pressure release from the dive, or perhaps something being knocked during handling or when another camera is dumped in on top, I am not sure. But I have still seen more rinse tank floods than ocean ones. As a consequence you will never find my



***Leak Insure sachets, designed to soak up minor housing floods, are available in different sizes for different types of underwater housing.***

housing in a rinse tank unattended by me.

The more common type of flood is the slow leak. This is typically caused by a hair, grit or cut on an o-ring, which tend to cause a seepage of water. This is the type of flood that the product Leak Insure is designed to combat. You place one inside your housing and should water get in, the sachet will soak up the harmful brine and buying you more time to get the camera to the surface. Ah yes, you might have forgotten this was a review! I should apologise for the oversized introduction, but testing

a product that is designed to protect your camera in case of a leak is not straightforward. I wasn't prepared to open my housing underwater to see if it worked, I apologise if you're disappointed!

So does Leak Insure have any competition? The classic absorbent solution favoured by underwater photographers of all sexes, are female sanitary products. There are even different shapes available for different shaped housings. They are inexpensive and widely available, the main downside is when one falls out when you open your housing and rolls

across the deck of the dive boat!

Tampons are Leak Insure's main competition. So I compared a sachet of Leak Insure with a sanitary product I found in our bathroom cupboard. The Leak Insure was able to absorb about 30-50% more water, but interestingly the tampon expanded much more. And no, I didn't photograph the test. In short, the Leak Insure sachets expand less (to about 2-3 times their original size) and absorb more than a similar-sized tampon. This is particularly important if squeezing them inside a small compact housing.

And that, I thought, was that. I never expected to use Leak Insure in anger during the review, but I was wrong. This year I am experimenting with a very large dome port for split-level photos. But despite having months for the build, it was only finished the day before the shoot and it didn't fit on my housing properly, leaking slightly, but consistently. I taped the seals up the best I could and put all the sachets of Leak Insure I had in the housing as insurance. It stayed dry all the time, until the final afternoon on Lundy Island (UK), when it started to leak. I got out immediately the leak alarm went off and found the housing and camera almost dry, but the sachets expanded, suggesting a leak of a couple of more than 100ml (about a third of a coke can).

Leak Insure had kept the camera totally dry. However, while the sachets do not swell with any force, their expansion had jammed them into tight spaces inside the housing. Now wet, the outside of the sachets were weak and when I tried to pull them free they broke open, covering the inside of the housing with messy crystals. Obviously this is not damaging in any way, but annoying to clean up. So a suggested improvement for Leak Insure is stronger packaging for the sachets when wet,



*The sachet that I tested could absorb about 50ml of water.*

although most users won't mind if their camera survives.

Leak Insure's other property is as a desiccant, like silica gel sachets. I have never had condensation problem with a metal SLR housing. But compact cameras in plastic housings can be more problematic, especially when the internal flash is firing a lot, because this heats up the air inside causing it to steam up, particularly in cold water diving. We tried the Leak Insure sachets in several compact housings in the Red Sea and all of them avoided condensation problems. Although in the dry desert heat of Egypt, it wasn't perhaps the toughest test. I also did not do any back to back tests without the Leak Insure. But I have to conclude that using Leak Insure can only be beneficial.

So in summary, Leak Insure works well and is inexpensive (£15 GBP for a pack of 20 – which should last a long time). It is not an earth shattering revelation for underwater photographers, but it is a cheap and useful product (and much less embarrassing and fibrous than the alternative product). Leak Insure are in the process of expanding their network of stockist which currently include UK, Norway, Philippines and Australia, with more dealers being added all the time. They also sell direct from their website, and will post out



*An inexpensive and useful product. I now keep one taped to the base of my housing, just in case.*

to any countries without an official dealer.

In conclusion, Leak Insure is flood insurance we can all afford and may save you from that cocktail of salt water and Japanese electronics, which will always leave a sour taste in the mouth.

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[www.amustard.com](http://www.amustard.com)

[www.leakinsure.co.uk](http://www.leakinsure.co.uk)



[www.uwpmag.com](http://www.uwpmag.com)





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Subal 7D



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10bar Sony NEX-5



Diveross D40



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FIX S90



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For more infos and registration, visit [www.underwatertimorleste.com](http://www.underwatertimorleste.com)
- Christmas Shootout 23-31 Dec 2010 in Raja Ampat- Full !!!!
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