



Sorb Dust Controversy Revealed

Do you feel that you are buried underneath a mountain of Sorb Dust? This has been an age old debate between brands of diving sorb and is quite frankly full of conjectures, and wild opinions without a shred of facts. It has always been my premise to say that *Opinions are Like Arseholes as Everyone Has One*. So this article is devoted to uncovering the truth on sorb dust, NOT with opinions, but by using an independent professional to compare two common brands of diving lime: Intersorb Premium and MoPro Sofnolime. And unlike other dubious studies this survey will compare the same mesh size 8-12 to 8-12 and both brand made in the UK.

This article is not to defend either brand, and if you have read the previous CCR News (Comparing Apples to Pine-Apples) regarding misleading information on how one study compared these same companies, but they failed to adequately describe that they were comparing two completely different products. In this article I will be comparing two similar if not identical products in a fair and balanced manner.

Both of these common Co₂ absorbents are manufactured in the UK for primarily medical use, with other industries including mining, military, and diving as a consumer of these products. We will be comparing the diving grade which specifies hardness, moisture content, and a particle size of 8-12.

Intersurgical of Wokingham UK manufactures a premium brand of diving lime under the name of Intersorb 8-12. It is composed of 97% Calcium Hydroxide, 3% Sodium Hydroxide (dry ingredients) with 14-18% moisture content and 87% hardness.

Molecular Products of Essex UK manufactures a Leisure Diving 797 product commonly referred to as Sofnolime 8-12. It is composed of >75% Calcium Hydroxide , < 4% Sodium Hydroxide (wt of additives) , with 16-20% moisture content and >80% hardness.

What you have is two companies in the UK that manufacture nearly identical products of chemical composition, moisture content, hardness and relative size/shape. Divers have decided on their own to choose Coke over Pepsi as a personal decision, not based on any actual physical difference.

I choose the Premium Intersurgical Intersorb 8-12 as I like the fact that it has superior duration in NATO testing, less dust, and the keg has one more pound than the other competitor.

So where does this issue of dusting come from? In some cases you will have rebreathers that are inferior design and have issues with any dive lime dust. This typically manifests as dust causes o-rings or sealing surfaces to not seal resulting in leaks or water intrusion. Most rebreathers that are robust in design will not be affected by either brand of diving lime. In several rebreathers you will find a "Scrim" filter pad that some jest as a coffee filter as they look quite similar. The scrim pad is to prevent dust from any dive lime entering the inhale loop. Since rebreathers are a naturally humid environment any minor dust is typically adhered to walls of scrubber canister or lungs and does not enter breathing loop.

Most dusting issues are noticed when filling the scrubber and are much more readily noticed when packing a Radial scrubber verse an Axial. The one and only Holy Grail of Radial scrubbers, CisLunar, had a Hydrophobic membrane which did not have the dusting characteristic as do the commonly available radials such as Prism2, Meg, Golum-Gear/Xccr.

You can prevent either brand of diving lime from breaking down into dust by carefully handling the kegs, avoid dropping or excessive shaking of the kegs. And while it is a common held idea that we should always fill diving sorb outside, at a height of 12 - 18 inches above scrubber, with the wind gently blowing away any dust, it is not always practical and you will find yourself having to fill inside an enclosed space due to rain or other unfavorable environmental conditions. The author knows divers who will wear dust masks, gloves and HazMat suits when filling their sorb. This is an extreme example and most divers simply avoid the dust with prudent care and practices that they were taught during their ccr course.

In order to get completely independent results, I enlisted the most experienced dust professional and as everyone knows the Swedes are independent and have not been involved in any wars since 1814. The Swedish laboratory results showed that a small but insignificant increase in the amount of sorb dust from the MoPro keg verse the Intersorb keg. The results were then found to be inconclusive as to which sorb was "less dusty". And I cannot say that I was surprised, or that this was a victory for me in any sense as I have dived many sorbs over the years and in recent years of diving both Intersorb and MoPro and find neither one better or worse. I have read the studies and looked at the data and my conclusion is that "Opinions are like arseholes as everyone has one". My personal choice is the blue keg as I like the price, the extra weight, and since the chemical structure is identical then let the internet chatter monkeys holler away and throw their terds.... The expert opinion on one sorb being better for any reason was simply stated as BORK, BORK, BORK. You can't argue with an experts conclusion that is so eloquently stated.



Good Diving,

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