

# ADVISORY NOTICE

### **Background**

As COBRA use increases, JFD are receiving more reports and queries from clients about aspects of COBRA use. JFD feels that it will benefit all users to share these issues along with some comments.





## ISSUE CO2 Absorbent

Due to supply difficulties in certain locations, clients have asked about using CO2 absorbents other than Molecular Products 797 grade Sofnoline.



### **SOLUTION**

All the specified durations for the COBRA set were achieved using Molecular Products 797 grade Sofnoline. Use of any other material will alter the scrubber endurance of the COBRA set. During COBRA development, there was a limited amount of testing performed with other brands and grades of sodalime. The scrubber duration achieved with these materials was generally less than with Molecular Products 797 grade Sofnoline.

In addition to this, all the Work of Breathing testing was performed with the scrubber packed with Molecular Products 797 grade Sofnoline. Use of any other material will affect the breathing resistance of the COBRA set.







# ISSUE Endurance Testing

Clients are performing endurance testing as part of their COBRA drills.



### SOLUTION

JFD expect and encourage users to extensively drill with the COBRA sets and become familiar with the capabilities and limitations of the sets. Users are advised to ensure that endurance testing / drills are terminated before the gas injection to the COBRA set stops i.e. before the onboard gas is exhausted.

After this time, the ppO2 in the breathing loop will drop and eventually become hypoxic. The time taken for this to occur depends on the diver's breathing rate.

It should be noted that there will still be gas in the breathing loop at this point i.e. the diver may not be aware of any shortage of gas volume.

Users should also note that the contents gauge supplied with the COBRA set is of sealed construction. This gauge reads the pressure in the cylinders relative to atmospheric pressure, NOT current depth. Allowance must be made for the current operating depth when determining the remaining available gas.

Users are recommended to ensure that their procedures for endurance drills consider the above information.



### ISSUE COBRA Gas Table

Users have inquired about deviating from the gases specified in the manual for the working range of the dive to suit gas available on the vessel etc.



#### **SOLUTION**

The gas ranges specified in the manual are as wide as possible, while still allowing the set to perform as specified (maintaining breathable gas at 75 RMV for the specified duration) (62.5 RMV deeper than 300m).

Using gases outwith the specified O2% limits will compromise the performance of the COBRA set.