



## Topic: Storage

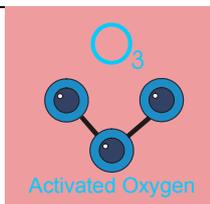
Fire hoses spend as much as 90% of their life in storage. Their ability **not** to deteriorate during storage whether as a single coil, dutch coiled or flaked is critical to their reliability. Typical tests to assess storage capability include BS6391 Type 3 ozone resistance and American Underwriters UL19 - permanent elongation (or set).



## Why is it important?

Ozone gas is everywhere and attacks stressed rubber at the layflat edge causing cracking which leads to leakage. Therefore, this hazard is at its greatest when the hose is in storage and held under stress.

Prolonged storage can also induce "cold flow" at the layflat edge. The compressed rubber at the inside layflat edge can give a thin section prone to cracking when subsequently pressurised, leading to leakage..



## How does Duraline perform?

Duraline is exceptionally resistant to these effects. Rubber constituents and additives are chosen to produce a truly homogenous material, highly impervious to cracking under ozone. BS6391 Type 3 requirements test both hose lining and cover in a concentrated ozone atmosphere where cracking must not be evident in under 96 hours. Duraline can survive over 500 hours with no evidence of cracking.



## How do other hoses compare?

Most other hoses have poor, particularly lining ozone resistance. The lining cracks in storage and subsequently leaks on pressurisation. Hoses can be cheapened by adding more thermoplastic material into the rubber compound which increases the risk of cold flow. In addition, most other hoses lack strict control over the vulcanisation process which also increases the risk of cold flow.



## Other support data:

BS6391 - The standard for covered fire hose  
If it isn't Angus, it can't be Duraline - The Video  
Duraline - The World's Finest Fire Hose - Powerpoint Presentation  
BS6391 Type 3 Fire Hose Specification