

## SAFETY ALERT- HIGH VISIBILITY SHIRT CATCHES FIRE



Figure 1-The fire damaged clothing



### Purpose

This safety alert informs motor sport stakeholders including, officials, competitors and pit/service crews of the danger of synthetic high visibility clothing catching fire when flames or ignition sources are present. It also highlights the need to control risks associated with 'hot work'

### Circumstances

With the need to control risks associated while working with and near mobile plant, high visibility (hi-vis) clothing is one of the most effective ways to alert drivers or operators that there are 'workers' in or near the immediate area. It assists in creating a safer workplace for all.

Often, this same style of hi-vis shirt (see picture above) is worn at motor sport events in the garages, service parks, paddock areas or officials managing spectator areas.

Recently a road construction worker (working near mobile plant) was using a demolition saw to cut a piece of steel when sparks ignited the stomach area of his high visibility shirt. He suffered burns to the stomach area and to both hands after trying to pat out the flames with his bare hands.

High visibility clothing made from synthetic fibres such as polyester and nylon can catch fire or melt. Oxy-cutting, arc welding, angle grinding and demo-saw cutting are examples of common work activities that cause sparks that can ignite these types of fibers. You should avoid wearing flammable, synthetic clothing when performing 'hot work'.

### Recommendations

So if you're carrying out 'hot work' at the event, think about managing the risk.

- Don't wear hi-vis flammable clothing when performing 'hot work'
- Consider any cutting that may need to take place, is done back at the workshop, before going to the event.
- Prohibit 'hot work' in areas where mobile plant is continually operating-so that high visibility clothing is not required in the area -where the work is being performed
- Replace grinders or other equipment that creates sparks with tools such as; bolt cutters-for cutting rods or hacksaw for - cutting steel pipe
- Delineate an area for competitors to use when they need to perform 'hot work', cordon off the area around and underneath the hot work to protect other competitors, service crews, officials and the public from the ignition source and ensure that a fire extinguisher is readily available.
- Provide training or instruction in the hot work task and related safety precautions
- Ensure that when undertaking 'hot work' also use other appropriate fire resistant protective clothing, such as aprons, jackets, trousers, gloves, head and neck protection, goggles or welders mask, as well as fire resistant high visibility or natural fibre clothing for the task being undertaken.
- **Remember-**If wearing hi-vis clothing whilst performing 'hot work' keep in mind that hi-vis clothing is available in many fabrics including cotton, wool, leather, Kevlar and Proban. These fabrics provide different levels of fire protection and are suitable under different conditions. It is always advisable to read the manufactures instructions for use to ensure the clothing provides the appropriate level of protection.

In summary, synthetic hi-vis shirts are appropriate in areas where you need to be seen, which maybe in the paddock area, service park and in carrying out event duties such as, traffic management and spectator control. Synthetic hi-vis shirts are not appropriate to wear whilst performing 'hot work' areas where there is a risk that flames or ignition sources are present.

### **Disclaimer**

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