

# Protect your people and business from vehicle fires

Wormald has a long and proud history of delivering specialised fire expertise across Australia. Our range of Vehicle Fire Suppression Systems has been developed for fires occurring in the engine and transmission compartments, brakes and hydraulic areas of heavy vehicles, plant and equipment used in industries such as mining, quarrying, construction, waste disposal and forestry.

## Aqueous Film Forming Foams (AFFFs)

Since the 1970s, Aqueous Film Forming Foams (AFFFs) have been used around the world to rapidly suppress and extinguish fires. AFFFs are water-based firefighting foam products used to suppress flammable liquid fires by cooling the fire and coating the fuel, preventing its contact with oxygen.

However, in recent years AFFFs containing fluorine have been identified as having adverse impacts on the environment. Historically, many of these foams include fluorinated surfactants such as PFOA and PFOS, which are part of a broader group of chemicals called PFAS substances. In response, Wormald has been working on migrating to more environmentally sustainable firefighting foams that are fluorine free.



EXISTING WORMALD AFFF SYSTEMS CAN BE EASILY UPGRADED TO FLUORINE FREE FOAM WITH MINOR MODIFICATIONS TO EXISTING SYSTEMS, SUCH AS AN INCREASE IN CYLINDER PRESSURE. THESE NEW FLUORINE FOAM CONCENTRATES ARE ESSENTIALLY 'DROP IN' REPLACEMENTS FOR THE EXISTING WORMALD AFFF CONCENTRATE SOLUTIONS CONTAINING FLUORINE.

# Wormald's proactive stance on firefighting foam contamination.

In response to State environmental regulation and end users' desire to reduce their environmental impact, Wormald are pleased to announce the approval of our Vehicle Suppression System using Fluorine Free Foam concentrate. Both Queensland and South Australia have either restricted or banned the use of Fluorinated Foam products. This new foam satisfies the requirements for use in these states.

## Wormald Fluorine Free Foam

The Wormald Foam Water Spray Vehicle Suppression System has been approved by Global-Mark as compliant with AS 5062-2016 and successfully passed the direct and indirect fire tests using Fluorine Free Foam. The new foam solution is essentially a drop in replacement to our previous AFFF solution. Discharge nozzles and ring main limitations remain unchanged while the cylinder operates at a higher pressure (1800 kPa compared to 1620 kPa). The old fluorinated foam solution is simply decanted for safe disposal at a licenced facility, the new foam is mixed within the cylinder, the gauge and label changed and the cylinder pressurised.

Wormald's Fluorine Free Foam is not only free of PFAS compounds including PFOS and PFOA, it is also solvent free. Whilst solvent use in fire-fighting foams is not currently subject to regulation, they do have a significant organic load. This means solvent-containing foams have a high Chemical Oxygen Demand (COD) i.e. it reduces the available oxygen in waterways. Removing solvents reduces the COD by up to 75% resulting in foam that provides a higher level of environmental protection compared to others.

To facilitate change to the new foam, Wormald supplies conversion kits containing the required amount of Fluorine Free Foam concentrate and a new gauge and label. This simplifies the conversion process and also addresses manual handling and safe work practices aboard machinery and vehicles.



**TO REQUEST A FOAM  
CONVERSION KIT QUOTATION OR  
ADDITIONAL INFORMATION PLEASE  
CONTACT WORMALD**

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