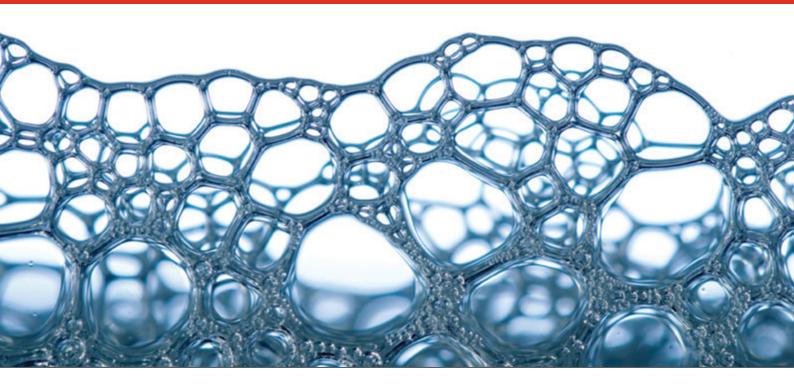


# **Angus Respondol FFF ARC 3x3**Fluorine Free Foam Concentrate

Industry ▶ Foam agents ▶ Respondol FFF ARC 3x3



### **Angus Respondol ATF 3-3%**

Respondol ATF 3-3 is a superior quality 3% synthetic fluorine free (FF) foam concentrate, designed for extinguishing and securing all types of flammable liquid fires and Class A incidents. Respondol ATF 3-3 has been designed specifically for emergency responders who are faced with a variety of risks in a range of situations.

Respondol ATF 3-3 is a patented combination of surfactants and other ingredients to produce a vapour sealing blanket of foam that rapidly spreads over the surface of the fuel to provide rapid control and extinguishment.

- Unique patented formulation only available from Angus Fire.
- Specifically designed for those emergency responders under environmental pressures.
- Approved to EN1568 part 3 and 4 on all fuels and all water types.



#### **Features**

- High approval rating under EN1568 pt 3 & 4 on all fuels using all waters; 1A/1A – 1A/1A – 2A/2A.
- Lower viscosity than other fluorine free foams to ensure easy induction.
- Fluorine free to minimise environmental persistence.
- 3% induction on both hydrocarbon and polar solvent risks.

### **Applications**

Respondol ATF 3-3 is used in high risk situations where hydrocarbons (such as oils, gasoline, diesel fuel, and aviation kerosene) are stored, processed, or transported and/or polar solvents (such as alcohols, ketones, esters, and ethers) are stored, processed, or transported.

Respondol ATF 3-3 provides a vapour suppressing foam blanket on unignited hydrocarbon spills.

Respondol ATF 3-3 can also be used as a wetting agent in combating fires in Class A materials such as wood, paper, and tyres.

### **Approvals and listings**

Respondol ATF 3-3 is independently tested and certified to EN1568:2008 part 3 and 4. Performance exceeds the requirements of these tests.

Respondol ATF 3-3 is audited and approved to Underwriters Laboratories UL162 (7th Edition).





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#### **Equipment**

Respondol ATF 3-3 is intended for use at 3% (3 parts concentrate to 97 parts of water) on hydrocarbons and polar solvents. Respondol ATF 3-3 is readily proportioned using conventional foam proportioning equipment such as portable and fired (in-line) foam venturi proportioners, handline nozzles/branchpipes with pick-up tubes, balanced pressure variable flow proportioners, balanced pressure bladder tank proportioners, and around-the-pump proportioners.

#### Compatibility

Respondol ATF 3-3 is suitable for use in combination with:

- Soft or hard, fresh, brackish or sea water.
- Expanded protein-based or synthetic foams for application to a fire in sequence or simultaneously.

#### **Environment**

Respondol ATF 3-3 is PFOS free in accordance with EU Directive 2006/122/ EC and amended Council Directive 76/769/EEC. Respondol ATF 3-3 is 100% biodegradable and is manufactured without any added fluorinated surfactants or fluorinated polymers.

### Storage

Respondol ATF 3-3 is exceptionally stable in long-term storage. A shelf-life of at least ten years can be expected if it is stored correctly.

### Disposal

For fire water runoff and accidental spillage please refer to Angus Fire's Foam Disposal Guide and MSDS for more information.

#### **Product Quality**

Respondol ATF 3-3 production is closely controlled, Angus Fire operates a quality management system which complies with the requirements of BS EN ISO 9001 and BS EN ISO 14001.









EN1568:2008 Parts 3 & 4





## **Angus Respondol FFF ARC 3x3** Fluorine Free Foam Concentrate

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Typical Physico-Chemical Properties		
Appearance	Pale yellow	
Specific ravity @ 20°C (68°F)	1.02 – 1.04	
pH @ 20°C (68°F)	7 - 8	
Viscosity cP	Non newtonian	
Maximum continuous storage temperature	40°C (104°F)	
Maximum intermittent storage temperature	60°C (140 °F)	
Effect of freeze/thaw	No performance loss	
Lowest use temperature	-5°C	
Sediment as shipped	≤ 0.1% v/v	
Sediment after ageing	≤ 0.5 % v/v	

Typical Foam Properties:		
These vary depending on the performance characteristics of the foam.		
When tested in accordance with UK Defence Specification 42-41 it gives the following typical properties.		
Induction rate	3%	
Expansion ratio	≥ 7:1	
25% drainage time	≥ 30 min	



