

# Don't Dilute Your Cleaning Capabilities

The benefits of future proofing your cleaning solutions with Chemours™ Solvent Technology vs Aqueous Fluids

The Chemours™ Opteon range of safe, environmentally friendly solvents have become widely accepted as best in class, next generation fluids approved for use in many standard cleaning systems. With superior performance and an ultralow GWP<sup>9</sup> of <2, the Opteon range is recyclable and reusable, significantly reducing costs and environmental impact, and most importantly, they are extremely safe and easy to use.



**Smaller footprint**<sup>7</sup>  
Comparable aqueous equipment takes up 2-3 times more space



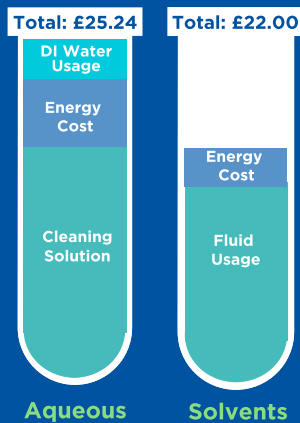
**Greener credentials**<sup>8</sup>  
**75%** reduction in weekly CO2 usage  
**Aqueous:** 70.8kg CO2 per week  
**Solvents:** 16.6kg CO2 per week

## Lower costs



Water treatment costs can increase the average daily price of consumables

**Aqueous:** £25.24  
**Solvents:** £22.00



**Quicker cycles**<sup>3</sup>  
Better results in less than a third of the time  
**8 mins Solvents** vs **30 mins Aqueous**

**3x**

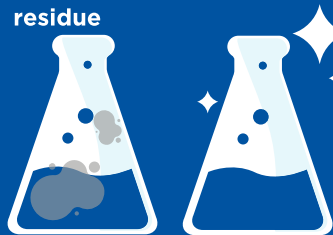
**Surface Penetration**<sup>1</sup>  
for better cleaning

**Solvents** 20 mN/m  
**Aqueous** 72 mN/m

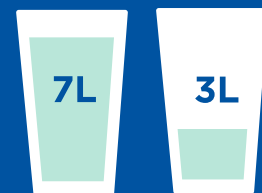
**Energy efficient**<sup>5</sup>  
Chemours solvents are five times more energy efficient



**Remove residue**<sup>2</sup>  
Solvent fluids leave zero residue



**Less liquid**<sup>6</sup>  
Solvents reduce fluid consumption by half per week



T: 01506 443 058  
E: sales@frasertech.co.uk  
www.frasertech.co.uk

# References

<u>Factor</u>	<u>Aqueous</u>	<u>Chemours Speciality Fluids</u>
<b>Tight space penetration<sup>1</sup></b>	72 millinewton per meter (mN/m) (surface tension)	20 millinewton per meter (mN/m) (surface tension)
<b>Residue<sup>2</sup></b>	High	Low
<b>Cycle time<sup>3</sup></b>	30 minutes	8 Minutes
<b>Process costs (per day)<sup>456</sup></b>	£25.24	£22.00
<b>Energy usage<sup>5</sup></b>	30 kwh	6 kwh
<b>Fluid usage (per week)<sup>6</sup></b>	7 Litres	3 litres
<b>Equipment footprint<sup>7</sup></b>	3:1 (need 3 times more space than vapour degreaser)	1:1
<b>Co2 Equivalent Emissions / week<sup>8</sup></b>	CO2 emissions 70.8kg per day	CO2 emissions 16.6kg per day

1) Millinewton per meter (mN/m) is used to measure surface tension. The lower the millinewton per meter, the smaller the spaces the chemical can penetrate, so the low surface tension of Chemours Specialty Fluids fluid allows more effective cleaning, rinsing and drying.

2) Chemours Specialty Fluids fluid evaporates quickly with zero residue, eliminating the need for chemical rinsing or hot air drying.

3) Shorter cycle times for vapor degreasing with Chemours Specialty Fluids fluid can help increase throughput and productivity.

4) This data is representational and may vary. It is based on the following assumptions.

5) Solvent cleaning with Chemours Specialty Fluids can result in significantly less energy usage.

6) DI water usage for aqueous cleaning is 160 litres per hour, or 1,280 litres per day. Based on non-closed loop aqueous system.

7) Aqueous: 4.2 square m 1.2m x 3.5m equipment plus 1m x 1m for external DI water heater. Solvent: 1.5m Square 1.2m x 1.2m'.

9) Global warming is a gradual increase in the overall temperature of the earth's atmosphere, generally attributed to the greenhouse effect, caused by increased levels of carbon dioxide, CFCs, and other pollutants. GWP is used to represent the equivalent of CO2 being released into the atmosphere. So 1kg of CO2 = a GWP of 1.