



Shell Adrana D 408

Water extendible metalworking fluid

Shell Adrana D 408 is a high quality, general-purpose metalworking fluid recommended for light to medium duty operations on a broad range of materials.

Applications

Shell Adrana D 408 is recommended, over a broad water hardness range, for general machining operations on cast iron, steel, and aluminum alloys. Shell Adrana D 408 is also suitable for machining of copper alloys.

Performance Features and Benefits

- **Low foam** in soft water
- **Good stability** ensuring prolonged sump life
- **Good corrosion protection**
- **Good detergency** offering low drag out, clean parts and machine tools, and a better working environment
- **Operator friendly**

Recommended Concentrations

The concentration varies depending on the type of machining operation, the water hardness, and the required corrosion protection. The typical recommended concentrations for use in medium water hardness are:

- General machining : 5 – 7 %
- Heavy duty machining : 8 – 12 %
- Grinding : 4 – 5 %

Storage

The product should be stored inside (41-104°F) for no more than one year. Freezing should be avoided.

Health & Safety

Please note that mixed coolants work over long periods of time, therefore chemical contamination (hydraulic oils, greases, metal solutions, paints, rust inhibitors, etc.) or bacterial contamination (from dirty hands, work pieces, industrial grade water, sundry waste, etc.) can often occur. Contamination with the above materials should be minimized/eliminated. Regular monitoring of the in-use product is recommended to maintain optimum product condition and for determination of its useful working life.

Protect the environment

Waste must be disposed of in accordance with EC Directive 91/156, 91/689 and 94/62 or in line with local legislation.

Typical Physical Characteristics

	Unit	Method	Shell Adrana D 408	
Product Codes			Drum	5073143
			Pail	5073352
Mineral Oil content	%		30	
Density @ 20°C	g/mL	ASTM D 1298	0.98	
pH of the emulsion at 5%		DIN 51369	9.1	
Min Anti-Cor. Protection Limit (0-0)	%	DIN 51360/2	5.0	
Refractometer Factor			1.40	
Acid Split Factor			1.53	

These characteristics are typical of current production. While future production will conform to Shell's specification, variations in these characteristics may occur.