



Shell Adrana D 601.01

Water extendible metalworking fluid

Shell Adrana D 601.01 is a high quality metalworking fluid recommended for medium to heavy duty machining of high carbon steel and alloyed special steels with high tensile strength. It is free of chlorine, nitrite and secondary amines.

Applications

Shell Adrana D 601.01 is a micro-emulsion with a high level of EP additives. It is recommended for medium to heavy duty machining of all types of steel alloys. Shell Adrana D 601.01 is also suitable for grinding operations including creep feed grinding. Excellent results are also achieved in band sawing applications on steel alloys.

- Medium duty operations : 5 – 7 %
- Heavy duty operations : 8 – 12 %
- Grinding : 4 – 6 %

Storage

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

Performance Features and Benefits

- **High lubricity** – resulting in prolonged tool life, increased surface finish, lower reject rate
- **Good stability** – ensuring long sump life
- **Good corrosion protection**
- **Good foaming behavior** – in water of low and medium hardness
- **Better working conditions** – reduced mist/smoke formation in heavy duty machining
- **Operator friendly** – greatly reduced risk of medical problems (dermatitis,)

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.

Recommended Concentrations

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

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 601.01	
Product Codes			Drum	5073144
			Pail	5073355
Mineral Oil content	%		19	
Kinematic Viscosity @ 20°C	mm ² /s	ASTM D 445	190-250	
Density @ 20°C	g/mL	ASTM D 1298	1.02	
pH of the emulsion at 3%		DIN 51369	9.25	
Min Anti-Cor. Protection Limit (0-0)	%	DIN 51360/2	4.0	
Refractometer Factor			1.35	
Acid Split Factor			2.2	

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