



Shell Adrana D 601.01

Water miscible 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.

Applications

Shell Adrana D 601.01 is a micro-emulsion with a high level of EP-additives 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.

machining operation, the water hardness and the required inter-operational corrosion protection. The recommended concentration for use is:

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

Performance Features and Benefits

- **High lubricity** – resulting in prolonged tool life, increased surface finish, lower reject rate
- **Very good detergency** – resulting in clean parts, machines and assisting in creating a more pleasant working environment
- **Good corrosion protection** – resulting in lower reject rate and decreasing maintenance cost related to corrosion problems
- **Good foaming behaviour** – ensuring problem free working operations and allowing high pump pressures/flow rates
- **Reduced smoke formation in heavy duty machining** – creating a healthier and more pleasant working environment
- **Good stability** – ensuring long sump life
- **Environmental compliance** – free of chlorine, secondary amines, phenol and nitrite

Storage

The product should be stored inside (5-40°C) for no more than 1 year and be protected from freezing.

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 minimised or ideally eliminated. Regular monitoring of the in-use product is recommended to maintain optimum product condition and determine the end of its useful working life.

Recommended Concentrations

The concentration varies depending on the type of

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
Mineral Oil content	%		19
Kinematic Viscosity @ 20°C	mm ² /s	ASTM D 445	Approx 300
Density @ 20°C	kg/m ³	ASTM D 1298	1015
pH of the emulsion at 5%		DIN 51369	9.4
Min Anti-Cor. Protection Limit (0-0)	%	DIN 51360/2	4
Refractometer Factor			1.4
Acid Split Factor			2.3

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