



Shell Adrana B 3202

Water extendible metalworking fluid

Shell Adrana B 3202 is a high quality metalworking fluid based on an innovative technology that assures the prevention of microbiological degradation without the use of biocides and/or biostatic agents. Shell Adrana B 3202 is free of chlorine, DEA, Boron, formaldehyde (releasers) and other biocides.

Applications

Shell Adrana B 3202 is an innovative water extendible metalworking fluid recommended for general machining and grinding operations on cast iron and low to medium alloyed steels. Although free of biocides and biostatic agents, this innovative technology, developed by Shell, provides the fluid with excellent biostatic properties. This new technology prevents the microbiological degradation of the fluid without being detrimental to the technical requirements demanded from today's coolants by customers and machine tool builders.

Performance Features and Benefits

- **Free of biocide**
- **High detergency** for clean parts and machine tools
- **Low foam** in soft water conditions
- **Operator friendly** – greatly reduced risk of medical problems (dermatitis, ...)
- **High HSSE profile** – highest health and safety requirements and local regulation easily met.

Recommended Concentrations

The concentration varies depending on the type of machining operation, the water hardness, and the

required corrosion protection. The typical recommended concentrations are:

- General machining : 6 – 8 %
- Grinding : 5 – 7 %

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 B 3202	
Product Codes			Drum	5073145
			Pail	5073356
Mineral Oil content	%		21	
Density @ 20°C	g/mL	ASTM D 1298	1.02	
pH of the emulsion at 5 %		DIN 51369	9.2	
Min Anti-Cor. Protection Limit (0-0)	%	DIN 51360/2	6.0	
Refractometer Factor			1.3	
Acid Split Factor			2.42	

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