SHELL SITALA® D 201.03 Water extendible metalworking fluid

SHELL SITALA® D 201.03 is a high quality metalworking fluid recommended for light to medium duty operations on ferrous metals and aluminum. It is free of chlorine, hexahydrotriazine and secondary amines.

Performance Features and Benefits

- Good foaming behaviors
- Odorless
- Good biostability encouraging longer service life
- Good corrosion protection
- Good detergency offering low drag out, clean parts and machine tools, and a better working environment
- Operator friendly

Main Applications

SHELL SITALA® D 201.03 is an excellent, problem free, general purpose product to be recommended (over a broad water hardness range) for all type of light to medium duty operations (including grinding) on cast iron, steel, and aluminum alloys.

Advice on applications not covered in this handbook may be obtained from your Shell representative.

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 %

- Grinding : 4 5 %
- Severe cutting operations : 8 12 %

Storage Requirements

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

Handling and Safety Information

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 it's useful working life.

For information on the safe handling, storage, or use of this product, refer to its Material Safety Data Sheet at http://www.epc.shell.com/. If you are a Shell Distributor, please call 1+800-332-6457 for all of your service needs. All other customers please call 1+800-237-8645 for all of your service needs.

Protect the Environment

Do not discharge into drains, soil, or water.

| | Unit | Method | SHELL SITALA® D 201.03 |
|--------------------------------------|------|-------------|------------------------|
| Mineral Oil content | % | | 35 |
| Kinematic Viscosity @ 20°C | cSt | ASTM D 445 | 200 - 300 |
| Density @ 20°C | kg/L | ASTM D 1298 | 0.97 |
| pH of the emulsion at 5% | | DIN 51369 | 9.3 |
| Min Anti-Cor. Protection Limit (0-0) | % | DIN 51360/2 | 4.0 |
| Refractometer Factor | | | 1.2 |
| Acid Split Factor | | | 1.5 |

Typical Physical Characteristics

These characteristics are typical of current production. While future production will conform to Shell specifications, variation in these characteristics may occur.