



ENOC SECTUS SM 700

PRODUCT DESCRIPTION

ENOC SECTUS SM is a multipurpose fully synthetic biostable metalworking fluid. Recommended for the machining and grinding on a range of materials both steel and non-ferrous metal. **SECTUS SM 700** is chlorine, phenol and nitrite free and able to overcome foam problems in high speed machining operations.

APPLICATIONS

- ◆ Difficult machining operations such as gear cutting and boring of medium to high tensile steel
- ◆ High speed machining of ferrous and non-ferrous materials
- ◆ Centerless surface and cylindrical grinding of ferrous materials

PERFORMANCE STANDARDS

ISO 6743/7 L-MAH
IS 1115-1986
DEF STAN 91-23/1

DILUTION RECOMMENDATIONS

ENOC SECTUS SM 700 is preferred choice for grinding and for machining operations where cooling is of utmost importance. It is usually diluted to oil / water ratios ranging from 1 : 10 to 1 : 60 . Because there are so many variables to be considered from job to job, it is impractical to make specific recommendation of optimum oil to water ratios. However in general, the richer emulsions are used for the more difficult jobs, the intermediate for the free-machining metals and the lean mixtures are used for such operations as grinding, where massive cooling is required. Here below are guidelines for water to oil ratios :

- Milling, boring and turning operations on non-ferrous and ferrous metals with machinability rating of 50 – 100 is 30 : 1; for Aluminium and Copper 10: 1; for Copper alloys 15 : 1
- Machining operations as planing and shaping, plain drilling and sawing of non-ferrous and ferrous metals with machinability rating 30 – 100 is 30 : 1 for Aluminium and Copper ; 10:1; for Copper alloys; 20:1 for ferrous metals
- Used for plain grinding operations of ferrous and non-ferrous metals 40:1 to 50:1
- Other uses; Rust preventive for automotive radiators at 40:1 ratio; Rust preventive in water hydraulic systems at 10:1 ratio.

Note :

- 1. Always add neat oil to water. Never add water to the oil. This will counteract the possibility of getting an invert emulsion (water drop surrounded by oil) which has low cooling ability.**
- 2. Never use soluble oil emulsions for cutting Magnesium. Hot magnesium and water are a fire hazard..**



BENEFITS

SECTUS SM 700 provides:

- ◆ Overcomes difficult machining operations
- ◆ Provide a high level of precision and surface finish
- ◆ Excellent wetting and cooling performance and corrosion protection
- ◆ Excellent fluid stability for prolonged operations
- ◆ Good resistance to bacterial growth and foam resistance.

Caution: Flush the system well when moving from mineral oil to synthetic cutting oil

Technical Data*	
Viscosity, cSt, at 100 Deg.C	6.18
Pour Point , Deg C	-15
Cold Test at 40 Deg. C	Pass
Flash Point, COC, Deg.C	130
Emulsibility	Pass
Emulsibility Stability	Pass
Foaming	Pass
Product Code	271011

The information prepared provides the typical properties that are considered as representative. Some variation which will not affect performance is possible

HEALTH AND SAFETY, ENVIRONMENT

The information on this product is available in the ENOC Material Safety Data Sheet (MSDS) as a guide to the precautions and safe handling of this product and its disposal. For further information we recommend you review the MSDS. Handled correctly there are no special precautions suggested.