

SPIRIT MS 3000



Metalworking

Multipurpose chlorine-free micro-emulsion.

UTILISATIONS

- **SPIRIT MS 3000** is recommended for the machining of cast iron and low carbon steel.
- **SPIRIT MS 3000** gives very good results in plane, cylindrical or centerless grinding.
- Recommended proportions:
 - grinding: 3 %
 - machining: 4 to 7 %.

SPECIFICATIONS

- ISO-L MAE

ADVANTAGES

- **SPIRIT MS 3000** make with water a stable opalescent micro emulsion.
- **SPIRIT MS 3000** has been designed to guarantee:
 - good corrosion protection for machined parts and machines,
 - non-foaming,
 - good resistance to bacterial growth.
- **SPIRIT MS 3000** have an excellent wetting and cooling capability.
- Very easy to use: simply pour **SPIRIT MS 3000** into good quality water.

HANDLING OPERATIONS - HEALTH - SAFETY

- **SPIRIT MS 3000** has no particular smell and contain no phenol, nitrite, chlorine, diethanolamine (DEA) glycol ether.
- **SPIRIT MS 3000** satisfies the German TRGS 611 legislation (technical rules governing the handling of hazardous substances).

TYPICAL CHARACTERISTICS	METHODS	UNITS	SPIRIT MS 3000	
			CONCENTRATE	5 % SOLUTION
Appearance	Visual		clear	
Color	ISO 2049		1.5	
Density at 15°C	ISO 3675	kg/m ³	1029	
Kinematic viscosity at 40°C	ISO 3104	mm ² /s	7.8	
Appearance	Visual			Opalescent
pH	NF T 60 193			9.3
Refractometric correction factor			2.1	

Above characteristics are mean values given as an information.

TOTAL LUBRIFIANTS
Industrie & Spécialités
22-12-2008 (supersedes 06-12-2006)
SPIRIT MS 3000
1/1



This lubricant used as recommended and for the application for which it has been designed does not present any particular risk.
A material safety data sheet conforming to the regulations in use in the E.C. can be obtained from your local commercial adviser or down loaded from www.quick-fds.com.