



METALWORKING

DATAFILE

MAXIM SYNTHETIC 540 BLUE METALWORKING FLUID

MAXIM SYNTHETIC 540 BLUE is a water extendable, oil rejecting, polyalkylene glycol based synthetic cutting and grinding fluid formulated to perform exceptionally in a variety of machine operations.

MAXIM SYNTHETIC 540 BLUE, when diluted with water; exhibits excellent cooling properties for superior finishes and increased tool life. 540 BLUE is recommended for use in operations involving the most difficult to machine alloys including stainless, titanium and high nickel steels.

MAXIM SYNTHETIC 540 BLUE remains highly transparent to afford the machine operator full view of the work. Unlike many synthetics, the 540 BLUE remains fluid in and on the surfaces of the machining center allowing slideways, chucks, and tooling to work freely without a hard-to-clean, dry residue. The translucent dilute is non-foaming, and retains its oil rejecting characteristics in both soft and hard water. These and related traits compel the 540 BLUE to be an excellent choice in central coolant recovery systems where undiminishing filterability and rapid tramp oil separation is essential for favorable fluid recovery.

The 540 BLUE remains more environmentally acceptable as its biostatic system enjoys a high resistance to microbial degradation and rancidity without the use of formaldehyde-releasing amines or biocides. Expect longer coolant life in machine sumps and coolant systems without special maintenance procedures.

MAXIM SYNTHETIC 540 BLUE incorporates a two-part corrosion inhibiting package that provides protection for machine surfaces and parts in process. 540 BLUE also incorporates an inhibitor to assist in the prevention of galvanic corrosion between stacked parts. This feature makes 540 BLUE well suited for the machining of cast iron as well as a variety of machine operations on many aerospace alloys.

Recommended Starting Dilutions

Machining - drilling, turning, milling, tapping, boring, and reaming
1 : 25 (4%) to 1 : 10 (10%)

Grinding/Sawing - centerless, surface, cylindrical, internal, band
1 : 33 (3%) to 1 : 14 (7%)

Concentration Check

Concentration	1:33 (3%)	1:25 (4%)	1:20 (5%)	1:17 (6%)	1:14 (7%)	1:12 (8%)	1:11 (9%)	1:10 (10%)
Refractometer Reading (Brix Scale)	1.2	1.6	2.0	2.4	2.8	3.2	3.6	4.0

MAXIM SYNTHETIC 540 BLUE continued:

MAXIM SYNTHETIC 540 BLUE Performance Advantages

- + Unique Tool /Wheel Performance - Excellent cooling properties and extreme pressure lubricity combine to provide extended tool life.
- + Excellent Cleanliness - Remains transparent ; good settling properties provide for ease of contaminant removal; low foaming; No hard to remove residue on machine surfaces. Good choice for central recovery systems.
- + Exceptional Corrosion Control - Prevents in-process corrosion of work pieces and machine tool parts.
- + Long Life - More tolerant of hard water, tramp oils and has a high resistance to microbial degradation without the use of formaldehyde –releasing components.
- + High operator acceptance.

Typical Physical Characteristics

Weight, (lb.s / gal.)	.	.	.	.	.	8.74
Specific Gravity, 15C	.	.	.	.	.	1.05
Flash Point, COC F	.	.	.	.	.	none
pH, fresh,1:20 (5%) dilution	.	.	.	.	.	9.6
Color, dilution	.	.	.	.	opaque/blue-green	
Color, concentrate	.	.	.	.	available undyed & blue-green	

Packaging / Labeling

MAXIM SYNTHETIC 540 BLUE is available in 55 gallon steel drums, totes and bulk quantities.

D.O.T ID: chemical/rust preventive compound, class 65 NMFC50234
(NOT DOT REGULATED)

Label: Amine based compound - Possible eye irritant due to alkalinity in concentrate. Water-diluted material is not expected to be primary eye irritant when used as recommended. Read and understand Material Safety Data Sheet before handling or disposing of this product.

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For additional information, product samples, etc., please contact;
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