

## **MAXIM SYNTHETIC 238 GENERAL PURPOSE METALWORKING FLUID**

**MAXIM SYNTHETIC 238** is a water extendable, oil rejecting, polyalkylene glycol based synthetic cutting, sawing and grinding fluid formulated to perform exceptionally in a variety of machine operations.

**MAXIM SYNTHETIC 238**, when diluted with water; exhibits excellent cooling properties for superior finishes and increased tool life. 238 is recommended for use when machining, sawing and grinding ferrous and materials where machinability requirements range from mild to moderately severe.

**MAXIM SYNTHETIC 238** remains highly transparent to afford the machine operator full view of the work. Unlike many synthetics, the 238 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, silicon free, and retains its oil rejecting characteristics in both soft and hard water. These and related traits compel the 238 to be an excellent choice in central coolant recovery systems where undiminishing filterability and rapid tramp oil separation is a contingency for favorable fluid recovery.

The effective biostatic system formulated into the 238 yields a higher resistance to microbial degradation and rancidity than conventional fluids; this allows for longer coolant life in machine sumps and central coolant systems without special maintenance procedures. 238 contains no DCHA, formaldehyde, chlorine, nitrite, phenol.

**MAXIM SYNTHETIC 238** incorporates a two-part corrosion inhibiting package that provides protection for machine surfaces and parts in process. The 238 also incorporates an inhibitor to assist in the prevention of galvanic corrosion between stacked parts. This feature makes the 238 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	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)	1.0	1.4	1.7	2.0	2.2	2.5	2.8	3.1

**MAXIM SYNTHETIC 238** continued

**MAXIM SYNTHETIC 238 Performance Advantages**

- + Unique Tool /Wheel Performance - Excellent cooling properties and extreme combine to provide extended tool life.
- + Excellent Cleanliness - Remains transparent ; good settling properties provide contaminant removal; low foaming; No hard to remove residue on
- + Exceptional Corrosion Control - Prevents in-process corrosion of work pieces machine tool parts.
- + Long Life - More tolerant of hard water and tramp oils and has a high resistance to rancidity.
- + High operator acceptance.

**Typical Physical Characteristics**

Specific Gravity, 60/60F	1.05
Flash Point, per COC F	none
pH, fresh,1:20 (5%) dilution	9.8
Color, concentrate	blue/ available undyed

**Packaging**

MAXIM SYNTHETIC 238 is available in 55 gallon steel drums, totes and bulk quantities.

**MAXIM OIL & CHEMICAL COMPANY**  
Fort Worth, Texas Phone (817) 293-4645  
[www.maximoil.com](http://www.maximoil.com)

**DISCLAIMER** Information contained herein is believed to be correct and reliable. However, Maxim Petrochemical Corporation does not assume liability for it or for recommendations of our representatives inasmuch as conditions and methods of use are beyond our control. Further, we make no warranty, expressed or implied, of any kind regarding those products or their use and purchaser assumes all risks of use or handling either in accordance with directions or not.

**MANUFACTURER DISCLAIMER** The information and recommendations contained herein are, to the best of the knowledge and belief of Maxim Petrochemical Corporation, accurate and reliable as of the date issued. Maxim does not warrant or guarantee their reliability, and Maxim shall not be liable for any loss or damage arising out of use thereof. The information and recommendations are for the user's consideration and examination. Conditions of use are beyond Maxim's control and therefore users are responsible to verify this data under their own operating conditions to determine whether the product is suitable for their particular purposes and they assume all risk of their use, handling, and disposal of the product(s). This information relates only to the product(s) designated herein and does not relate to its use in combination with any other material or in any other process.