

YOKOHAMA / BORON OIL M

WATER-MISCIBLE METALWORKING FLUID

| PRODUCT DESCRIPTION

YOKOHAMA BORON OIL M is a multi-purpose, water-miscible metalworking concentrate developed for cutting and grinding operations. When mixed with water, it forms an emulsion intended to combine effective cooling with lubrication at the tool-workpiece interface. The fluid helps manage friction and heat generation while assisting chip removal and surface cleanliness. Stable emulsion management, corrosion control and appropriate filtration support consistent machining conditions and dependable fluid-system operation.

| APPLICATIONS

Designed for turning, milling, drilling, cutting and suitable grinding operations using water-miscible coolant systems. Typical applications include steel and cast iron machining in workshops, machining centres and central coolant circuits. Compatibility with aluminium, copper and their alloys should be evaluated for staining and corrosion behaviour. Working concentration and fluid condition are managed according to material, process severity, coolant delivery and operating conditions.

| EMULSION PREPARATION & MONITORING

Clean the tank and circulation lines before preparing a fresh emulsion. Add concentrate slowly to water while mixing. Top up with a premixed emulsion at the intended concentration. Monitor water hardness, concentration, pH, microbial condition and contamination. Use a verified product-specific refractometer correction factor.

| TYPICAL TECHNICAL CHARACTERISTICS

PROPERTY	TEST METHOD	TYPICAL VALUE
Density at 15°C (concentrate)	—	887.53 kg/m ³
Kinematic Viscosity at 40°C (concentrate)	—	31.96 mm ² /s
Emulsion pH, 5% in deionised / distilled water	—	8.74

Note: The values shown in this table are typical values and do not constitute product specifications. Minor variations may occur between production batches due to normal manufacturing tolerances.