# FUNCTIONAL PRODUCTS INC.

**Innovative Chemistry for Lubricants** 

### **Technical Data Sheet**

## **FUNCTIONAL MW-612**

#### ANTIMISTING ADDITIVE for WATER-BASED COOLANTS

#### **APPLICATION:**

Misting of metalworking coolants is an environmental and health concern in many metal-removal applications, such as milling and grinding. Conventional control technologies frequently involve high capital expenditures and maintenance costs. **FUNCTIONAL MW-612** greatly reduces the formation of coolant mists, and is especially valuable in equipment that lacks mist-collecting systems. **FUNCTIONAL MW-612** is for soluble oils, semi-synthetics, and full synthetic coolants. **FUNCTIONAL MW-612** may be added tank side - see the handling instructions below.

#### **COMPOSITION:**

The active ingredient in **FUNCTIONAL MW-612** is a water-soluble polymer. The concentrated additive is easy to handle because the polymer is emulsified into an organic carrier. The polymer dissolves in the coolant and then uncoils to provide the anti- misting properties.

Typical Properties	
Appearance	Milky liquid
Odor	Mild
Specific Gravity	1.05
Lbs per Gallon	8.7
Flash Point	None (water boils off)
Kinematic Viscosity	3.0-8.0 cSt at 40°C @ 1% in water

#### TREATMENT LEVEL:

Maintain anti-misting properties by maintaining about 0.02% **FUNCTIONAL MW-612** in the coolant as used. About 0.5% in a 1:20 coolant concentrate will produce a suitable level but will make the concentrate noticeably more viscous. Use a higher concentration in concentrates intended for low-drag out systems, to allow for shear of the polymer in service.

#### **HANDLING:**

Always add the **FUNCTIONAL MW-612** to well-stirred coolant or concentrate; avoid letting the coolant and additive sit without stirring; see the Application Bulletin. Never add water or coolant to the additive or it will become a sticky mass. **FUNCTIONAL MW-612** contains water and it should be protected from freezing. Waste coolants containing **FUNCTIONAL MW-612** may be treated by the same water-treatment methods that would be used for the coolants without the additive.

Coolants containing anti-misting additives can be very slippery and spills should be cleaned up promptly. Spills of **FUNCTIONAL MW-612** or coolant should first be absorbed until visually dry before attempting to wash the spill area. Coolant spills may then be washed with water, but spills of the concentrated additive should either be washed with a hydrocarbon solvent or washed <u>repeatedly</u> with water until the spill is no longer slippery when wet. A dry appearance does not guarantee that the slipperiness is gone.

This Technical Data Sheet and the Safety Data Sheet contain information believed to be accurate and reliable. No warranty is made, however, to information beyond the control of FUNCTIONAL PRODUCTS INC. The engineering and management personnel of the user are responsible for determining the suitability of this or any product for any specific application, and this information is offered to them for that purpose.

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