

# Polihim Research and Production Enterprise (OOO)

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## POLITREN MR-S

### COOLING LUBRICANT

### DESCRIPTION

**Politren MR-S** is an oil cooling lubricant based on mineral oil and a complex of anti-wear, extreme-pressure, detergent, dispersing and other additives. This product is a multi-purpose cooling lubricant, which increases durability of cutting tools, purity of products' surfaces, and speed of machining, in addition to low oil fog and smoke level. It is used for steels and non-ferrous metal alloys, in a wide range of cutting, pressing and grinding modes.

### PHYSICAL AND CHEMICAL PROPERTIES

Parameter	POLITREN MR-S
Appearance	Brown liquid
Density @20°C, g/cm <sup>3</sup> , not less than	0.8
Effective viscosity @20°C, Pa-s, not less than	0.08
Flash point in an open cup, °C, not less than	175
Corrosion characteristics	+
Storage life, not less than	1 year

### USE

#### POLITREN MR-S

- is supplied ready to use;
- it is a cost-effective cooling lubricant for blade machining of metals and high-pressure processing of metals;

### SAFETY REQUIREMENTS, TOXICOLOGICAL PROPERTIES AND ENVIRONMENTAL PROTECTION

Politren MR-S coolant lubricant is a flammable liquid with a flash point of not less than 175°C in an open cup.

In accordance with GOST 12.1.007-76 the product is classified in the lowest hazard class IV (low hazard chemical compounds).

Upon single or multiple exposure the product does not irritate skin, or mucous membranes of the eyes. Volatile components neither cause irritation of mucous membranes of eyes or upper respiratory tract nor have a sensitizing effect.

When using this product the main component polluting the air in the working area is mineral oil aerosol (MPC is 5 mg/m<sup>3</sup>).

The premises where Politren MR-S is used shall be equipped with continuously operating supply and exhaust mechanical ventilation. Within the production facilities the air shall be monitored subject to the shop-floor air monitoring schedule agreed with the local public health authorities.

The personnel involved in handling the product shall wear protective clothing and use personal protective equipment in accordance with standard industry norms.

When manufacturing and/or using Politren MR-S oil-based solutions, the requirements of "Sanitary rules for working with cooling lubricants and tool lubrication", No. 3935-85 dated 09.29.1985, shall be complied with.

Use clean cloth to remove the lubricant from hands or face; wash the remaining product away with warm soapy water.

In case of ingress of the coolant lubricant onto working parts of the machinery, the floor of the machinery area shall be cleaned with rags, the remaining product shall be washed away with soapy water.

Politren MR-S is a water-insoluble oily liquid. Its maximum permissible concentration in water bodies (MPC<sub>w</sub>) determined for oil is 0.4 mg/l.