



## METAL WORKING OILS

# ADDINOL PENTA-COOL NM 63

### PRODUCT DESCRIPTION

ADDINOL Penta-Cool NM 63 is non-water miscible coolant based on special mineral oil fractions. It is free from chlorine and not emulsifiable. Additionally, the product contains sulphurous and phosphoric EP-additives, polar substances for the improvement of the lubricating capacity, antioxidants, corrosion inhibitors and anti-mist additives.

### APPLICATION

- Excellent suitability for the metal cutting of machining steel and aluminium material, alloyed and unalloyed quenched and tempered steel, construction steel and annealed cast iron as well as for gear teeth working including gear wheel grinding
- Highly suitable for the application in thread rolling processes

### CHARACTERISTICS

- Free from chlorine
- EP-additives
- Polar substances to improve the lubricating capacity
- Improved antioxidants
- Enhanced corrosion inhibitors
- Anti-mist additives

### DELIVERY

Delivery preferable in drums.

### APPLICATION CONCENTRATION

Undiluted application.

### PLEASE NOTE

Due to the high content of active sulphur compounds ADDINOL Penta-Cool NM 63 is not suitable for non-ferrous metals.

### ADVANTAGES AND BENEFITS

- No health hazards
- Processing also at higher loads
- Efficient lubrication at metal working
- Longer oil lifetime
- Very good protection of the workpieces
- No formation of aerosols





# ADDINOL PENTA-COOL NM 63

## SPECIFICATIONS AND TYPICAL PARAMETERS

Feature	Test condition / unit		Penta-Cool NM 63	Method acc. to
Appearance, colour			clear, yellow liquid	visual
Application concentration			undiluted	
Density	at 15°C	kg / m <sup>3</sup>	880	DIN EN ISO 12185
Viscosity	at 20°C	mm <sup>2</sup> /s	80	DIN EN ISO 3104
	at 40°C	mm <sup>2</sup> /s	30	
Flash point	COC	°C	210	DIN EN ISO 2592
Pour point		°C	-13	DIN ISO 3016
Sulphur content		%	1.0	DIN 51391-3
Aromatics content		%	< 9	

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We at ADDINOL develop and produce more than 600 high-performance lubricants of the new generation. Among these are automotive lubricants for highest demands and pioneering developments for industrial applications. Our customers all over the world benefit from the high and stable quality of our ADDINOL high-performance lubricants, our know-how and the individual customer advisory service of our competent experts. Our company has world wide activities. ADDINOL high-performance lubricants are distributed by more than 90 international partners.

The data given in this product sheet represent our current level of knowledge and experience. Due to the various specific application they do, however, not discharge the user from his own examination. The information provided herein may not be used to derive a legally binding warranty of specific properties or the suitability for a certain purpose of application. Detailed security-concerning and toxicological data as well as security instructions for each product can be taken from the corresponding Material Safety Data Sheets (MSDS). High-performance lubricants from ADDINOL are under continuous development. Therefore, ADDINOL Lube Oil GmbH keeps the right to change technical data in this product data sheet without notification. In case of doubt, please do not hesitate to contact our customers' advisory service.