

# Oil for metalworking

### **ACP EKO**

ACP – 1, 2, 3, - EKO oils are ecological, non-chlorine, and non-emulsifying oils for metal machining. They contain highly refined mineral and vegetable oils as well as polar lubricating additives

#### **Characteristics:**

ACP-1, 2, 3 EKO oils are primarily developed for machining steel, cast iron, copper and aluminium at high unit pressures and at high cutting speeds.

The choice of oil depends on the type of machining as below:

- ACP-1 EKO oil is used for contour turning of steel, cast iron and alloys of copper, for tooth chiselling, for reaming with multi-point reamers and for screw cutting of steel, cast iron and aluminium alloys.
- ACP-2 EKO oil is used for hobbing, reaming with multi-point reamer of steel, cast iron, alloys of copper and aluminium and for screw cutting of copper alloys as well as for rolling, shaving, pull broaching and push broaching.
- ACP-3 EKO oil is used for deep boring of steel, cast iron and copper alloys as well as when operating automatics.

Nº	Requirements	Research	Unit	Value		
		methods by		ACP-1 EKO	ACP-2 EKO	ACP-3 EKO
1.	Kinematic viscosity at 40°C	ASTM D-445	mm <sup>2</sup> /s	26	35	45
2.	Pour point	ASTM D-5950	°C	-12	-12	-12
3.	Flash point	PN-EN ISO 2592	°C	195	195	195
4.	Corrosive effect for steel and copper plates 100°C /3h corrosion degree	PN-85/C- 04093		Remains stable	Remains stable	Remains stable

The above given data are the typical values for a production batch, they are not included in technical specification, and they are subject to change due to continual product research and development.

# Specifications/ classifications:

ISO L-MHE



#### Storage:

The products should be stored under a roof. If they are stored in the open air where they can be exposed to atmospheric conditions – rains, they should be placed in a horizontal position in order to avoid inrush of water to a container and to prevent label damaging; they should be covered with tarpaulin.

The products should not be stored at the temperature above 60°C and in the places where solar radiation is very strong or – temperatures very low. The expiry date is not less than 3 years if the storage conditions are satisfied.

## Health, Industrial Safety and the Environment:

Information concerning safety is included in the product Safety Sheet. It contains detailed information on possible threats, warnings, first aid as well as the impact on the environment and ways of utilization of the used products. LOTOS Oil SA and the cooperating companies do not take responsibility for misuse of the product or – the use with the violation of the precautions given. Before using the product for other than recommended purposes, seek advice in the local LOTOS Oil SA office.

The information provided in this data sheet is not intended to constitute an offer within the meaning of the Act of 23<sup>rd</sup> April 1964 - Civil Code. LOTOS Oil S.A. bears no responsibility for whatever effects of use (particularly in trade and investment decision-making) of information contained herein. Any data contained in the MSDS are typical process tolerance values and they are subject to change due to continual product research and development. Information provided in this document may undergo changes. LOTOS Oil S.A. is not responsible for the product availability.

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