



# eni Alaria

**eni ALARIA** oils are used for filling heat transfer units. They have excellent oxidation stability and withstand thermal decomposition, being formulated from carefully selected paraffinic base stocks. They are available in three grades.

## CHARACTERISTICS (TYPICAL FIGURES)

eni ALARIA		2	3	7
Viscosity at 40°C	mm <sup>2</sup> /s	14	30	95
Viscosity at 100°C	mm <sup>2</sup> /s	3,3	5,3	10,9
Viscosity Index	-	95	105	95
Flash Point COC	°C	194	215	270
Pour Point	°C	-18	-12	-9
Conradson Carbon Residue	%w	<0,01	<0,01	<0,01
Expansion cubic coefficient	mc/°C	0,00067	0,00066	0,00064
Mass density at 15°C	kg/l	0,850	0,870	0,889

## PROPERTIES AND PERFORMANCE

- The high quality of **eni ALARIA** heat transfer oils guarantees their resistance to high-temperature degradation, thus preventing deposit and sludge formation.
- The three viscosity grades permit selection of the oil best-suited for operating conditions, as far as temperatures are concerned.
- High-grade refining prevents deposit and sludge formation during operation, while the superior quality level ensures thermal stability up to temperatures where cracking starts.
- The paraffinic base stock is refined to guarantee good demulsibility and air-separation performance, thus ensuring proper operation of the heat transfer unit, by preventing the formation of steam and air bubbles at the hottest points.
- The heat transfer characteristics of **eni ALARIA** remain practically unchanged while in service, due to the very good oxidation resistance of these oils and their high-temperature stability.

## APPLICATIONS

**eni ALARIA 2** can be used in all "open" or "closed" type units with:

- maximum boiler outlet temperature: 305°C
- maximum boiler wall temperature: 340°C

**eni ALARIA 3** can be used in all "open" or "closed" type units with:

- maximum boiler outlet temperature: 305°C
- maximum boiler wall temperature: 320°C

**eni ALARIA 7** can be used in all "open" or "closed" type units with:

- maximum boiler outlet temperature: 300°C
- maximum boiler wall temperature: 315°C

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Higher working temperatures reduce oil life; the closer the working temperature to the cracking temperature and the longer that condition persists, the shorter the life.

**eni ALARIA 2** is also suitable for lubricating textile and glass-making machinery, for the preparation of silk-screen printing impastas in the ceramic industry, for the cutting of small ferrous and non-ferrous parts, for soaking plant fibres and as process oil in the production of chemicals and rubbers.

### OPERATING ADVICE

When starting-up a new unit or when restarting after maintenance, and also in the case of irregular operation at normal temperature caused by residual moisture in the oil, the temperature of the unit should be reduced to around 100 C and all the steam blown off before returning to the normal working temperature.