

# REWOCOROS® O 3

## Product description

REWOCOROS® O 3 is a fatty acid monoethanol amine (MEA) condensation product based on oleamide.

## Physical properties

Appearance 20 °C	brown, clear liquid
Water Content	max. 0.3 %
Pour Point	approx. 2 °C
Hydroxyl Value	120 - 150 mg KOH/g
Density 70 °C	0.927 - 0.935 g/cm <sup>3</sup>
pH Value 1 % Solution	9.7 - 10.7
Colour to Gardner	max. 10.0
Refractive Index	1.473 - 1.481
Solubility	water: dispersible mineral oils: soluble ester oils: soluble

## Application

REWOCOROS® O 3 is used as low foaming co-emulsifier for emulsifiable metal working fluids (MWF).

In rolling oil emulsions, REWOCOROS® O 3 is applied to re-emulsify already separated mineral oil, which improves emulsion stability and thus prolongs shelf life of rolling oil emulsions.

In combination with fatty acid amine soaps REWOCOROS® O 3 will significantly improve corrosion inhibiting properties of water miscible MWF.

The choice of the type of amine which is part of the MWF depends on many factors such as volatility, reserve alkalinity, cobalt and copper leaching as well as the kind of metal alloy that requires to become protected.

In terms of corrosion protection of ferrous metals, monoethanolamine (MEA) is advisable to apply whereas diglycolamine (DGA) should preferably be used for non-ferrous metals such as aluminium, magnesium and copper. REWOCOROS® O 3 can also be used along with petroleum sulfonates or alcohol ethoxylates for the formulation of soluble oils and semi synthetic fluids.

REWOCOROS® O 3 is soluble in mineral oils and most ester oils. If solubility problems occur, the addition of small amounts of fatty acids or glycols will mostly lead to clear MWF concentrates.

## Properties / Benefits

- REWOCOROS® O 3 provides excellent co-emulsifying properties which allows a reduction of the total emulsifier content.
- It increases the stability of MWF concentrates as well as of water-mixed MWF (emulsions).
- Due to its low foaming tendency REWOCOROS® O 3 can be applied for soft- and hard water applications.
- It improves the wetting properties of water-mixed MWF.
- It shows excellent performance on yellow metals with the right choice of amine.
- REWOCOROS® O 3 is a clear liquid product allowing an easy blending process.
- The product is not known to show any detrimental effects on the finished parts.
- REWOCOROS® O 3 is free of secondary amines and complies with German TRGS 611.

### Dosage / Handling

Depending on other components (such as surfactants, amines and fatty acids) that are present, we recommend a dosage of about 2 – 5 % of REWOCOROS® O 3 within the MWF concentrate to achieve optimal stability of MWF concentrates and emulsions as well as sufficient corrosion inhibiting properties.

### Storage stability

In originally sealed containers REWOCOROS® O 3 can be stored for at least 1 year at temperatures between 15 and 40 °C.

Storage below 10 °C may result in cloudiness or crystalline precipitation.

By warming up the product becomes clear without affecting the quality.

### Packaging

Bulk

190 kg steel drum

Pallet size: 4 x 190 kg = 760 kg

900 kg plastic container on steel pallet

### Registration status

The ingredients of REWOCOROS® O 3 are listed in the following chemical inventories:

EINECS, TSCA, DSL, AICS, ECL, ENCS, PICCS, NZIOC and CHINA

### Hazardous goods classification

Information concerning

- classification and labelling according to regulations for transport and for dangerous substances
- protective measures for storage and handling
- measures in case of accidents and fire
- toxicity and ecological effects

is given in our material safety data sheets.

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### Trademark notice and legal notice

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