AKYPO® RO 20 VG

**Emulsifier for Metalworking Fluids**

- Especially qualified for cooling lubricants with high oil-content
- Lubricating properties

All AKYPO-types present the following properties in formulations

- Hardwater stability
- Mildness to the skin
- Overall physico-chemical stability
- Support of the corrosion prevention

**Chemical Identification**

\[ R-O-(CH_2CH_2O)_nCH_2COOH \quad R = C_{16}/C_{18} \quad n = 2 \]

- **INCI**: OLETH-3 CARBOXYLIC ACID
- **CAS NUMBER**: 57635 - 48 - 0
- **Molecular Weight**: APPROX. 411
SPECIFICATION

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
<th>Standard</th>
</tr>
</thead>
<tbody>
<tr>
<td>Iodine colour index</td>
<td>max. 15</td>
<td>DIN 6162</td>
</tr>
<tr>
<td>Active matter (%)</td>
<td>min. 94.0</td>
<td>C-1000</td>
</tr>
<tr>
<td>Water (KF; %)</td>
<td>max. 5.0</td>
<td>ISO 760 : 1978</td>
</tr>
<tr>
<td>Chloride (as NaCl; %)</td>
<td>max. 0.3</td>
<td>DGF - H-III 9 (92)</td>
</tr>
<tr>
<td>Acid-value (mg KOH/g)</td>
<td>70.0 - 90.0</td>
<td>DGF - C - V 2 (81)</td>
</tr>
<tr>
<td>pH-value (10% in water)</td>
<td>2.5 - 3.5</td>
<td>DGF H-III 1</td>
</tr>
</tbody>
</table>

TYPICAL PROPERTIES

APPEARANCE (25°C) : CLEAR, BROWNISH, OILY LIQUID
IONIC NATURE     : ANIONIC / NONIONIC (DEPENDING ON PH-VALUE)

PROCESSING

THE PRODUCT IS EASILY PROCESSABLE IN AQUEOUS AS WELL AS IN OIL-BASED FORMULATIONS. PROCESS RECOMMENDATIONS ARE AVAILABLE UPON REQUEST.

STORAGE AND HANDLING

CAN BE SUPPLIED PACKED IN DRUMS (210 L) AND IN CONTAINERS (1000 L)
THE PRODUCT SHOULD BE STORED AT TEMPERATURES BETWEEN 15°C AND 40°C.

SAFETY - TOXICOLOGY AND ECOLOGY

THE PRODUCT CORRESPONDS TO APPROPRIATE REGULATIONS.

WGK : 1 (UBA-Nr. = 2494)
HS NUMBER : 3402 1190

FOR DETAILED INFORMATION ON SAFETY-RELATED ISSUES PLEASE SEE THE CORRESPONDING MATERIAL SAFETY DATA SHEET.

We do reserve the right to modify above mentioned specifications; with regard to possible deliveries the sales specification which apply at the time of the order being placed and which upon request may be put at your disposal, shall prevail.