# Unofficial TECHNICAL INFORMATION SHEET

## Additin® RC 8103

### Specialty Product

### Description:

Synthetic ester

### Composition

trimethylolpropane ester of special fatty acids

### Appearance

light-brown, low viscous liquid

### Colour (ASTM-D 1500)

approx. 3.5

### Viscosity @40°C (ASTM D 445)

approx. 85 mm²/s

### Acid number (ASTM D 974)

13 mg KOH/g

### Saponification number (DIN 51559)

approx. 200 mg KOH/g

### Flash point, COC (ASTM D 92)

approx. 180°C

### Density, 20°C (ASTM-D 1298)

approx. 940 kg/m³

### Mineral oil content

none
Application - water based and neat metalworking fluids - grinding oils
- honing oils - rolling oils

Additin RC 8103 is an excellent "lubricity" additive with low iodine number and free hydroxy-groups to give high affinity to metal surfaces. It exhibits the well known positive properties of Castor oil but avoids its disadvantages such as limited solubility and low thermal stability. The benefits of Additin RC 8103 are especially obvious in machining of Aluminum and its alloys.

Compared with other esters Additin RC 8103 is very thermally and hydrolytically stable. This allows its application in temperature regions where natural and other unsaturated fatty materials will form resins, and in water based lubricants.

Solubility Soluble in mineral oils and synthetic base oils. However, it is necessary to verify the solubility in the base oils used and the compatibility with other additives.