

Additin® RC 2317

EP Additive

Type EP additive; light coloured, low odoured, low viscosity, active sulphur carrier

Technical Data	Composition	sulphurized vegetable fatty acid esters, mineral oil-free
	Appearance	light brown, clear, low viscosity liquid
	Colour (ASTM-D 1500)	typ. 3.5
	Sulphur	approx. 17 % weight
	Active sulphur (ASTM-D 1662)	approx. 8 % weight
	Copper corrosion (ASTM-D 130) 5 % weight Additin RC 2317 in a paraffinic base oil, 3 h/100 °C	3a - 3b
	Viscosity, 40°C (ASTM-D 445)	approx. 55 mm ² /s
	Density, 20°C (ASTM-D 1298)	approx. 1.01 g/ml
	Flash point, COC (ASTM-D 92)	> 180°C

- Application**
- medium and heavy duty cutting oils
 - deep hole drilling oils
 - honing oils
 - grinding oils
 - broaching oils

Additin RC 2317 is a light-coloured, near odourless, low viscosity sulphur carrier. It is used for manufacturing metalworking fluids for cutting operations. Due to its low viscosity Additin RC 2317 is ideally suited for formulating metalworking fluids such as deep hole drilling and honing oils from which an excellent flushing effect is required. By virtue of specially selected raw material Additin RC 2317 exhibits a very low pourpoint and extended solubility in various base fluids compared to conventional sulphur carriers. Therefore Additin RC 2317 is ideally suited for metalworking oils based on hydrocrack oils. The performance of metalworking fluids containing Additin RC 2317 can be increased by combination with zinc dithiophosphates, e.g. Additin RC 3038, phosphoric acid partial esters or ashless phosphorus-sulphur additives e.g. RC 3880.

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.

Test Results**Paraffinic base oil, ISO VG 15**

	base oil, no additives	+2% by weight RC 2317	+5% by weight RC 2317	+10% by weight RC 2317	+15% by weight RC 2317
Four-ball test (DIN 51350, part 2) welding load	600 - 700 N	1800 - 2000 N	2000 - 2200 N	2800 - 3000 N	3200 - 3400 N
Four-ball test (DIN 51350, part 3) scar diameter 1h/300N	0.70 mm	0.50 mm	0.60 mm	0.63 mm	0.75 mm
Four-ball test (ASTM D-2783) weld point LWI			200 kg 38 kg	250 kg 42 kg	
Load-carrying test according to Brugger load capacity	approx. <20 N/mm ²	approx. 45 N/mm ²	approx. 60 N/mm ²	approx. 85 N/mm ²	approx. 95 N/mm ²

Packing Unit

200 kg bunghole drums

Storage Conditions

in a dry place at room temperature approx. 12 months

Handling

Consult material safety data sheet (MSDS) for additional handling information on Additin RC 2317.

® = registered trade mark * The analytical data are guide values. Additin RC 2317 is on EINECS and TSCA inventory.

Version: 1/12. Dec 2000

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products supplied by us as to their suitability for the intended processes and uses. The application, use and processing of the products are beyond our control and, therefore, entirely rely on your own responsibility. Should, in spite of this,

liability be established for any damage, it will be limited to the value of the goods delivered by us and used by you. We will, of course, provide products of consistent quality within the scope of our General Conditions of Sale and Delivery.

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