

Additin® RC 2540

EP Additive

Type

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

Technical data*

Composition	dialkylpentasulphide
Appearance	light coloured, low viscosity liquid
Colour (ASTM-D 1500)	typ. 2.5
Sulphur	approx. 40 % weight
Active sulphur (ASTM-D 1662)	approx. 36 % weight
Copper corrosion (ASTM-D 130) 2.5 % weight Additin RC 2540 in a paraffinic base oil, 3 h/100 °C	3b - 4b
Viscosity, 40 °C (ASTM-D 445)	approx. 45 mm ² /s
Density, 20 °C (ASTM-D 1298)	approx. 1.0 g/l
Flash point, COC (ASTM-D 92)	approx. 150 °C

Application

- water miscible metalworking fluids
- neat metalworking fluids

The use of Additin RC 2540 is a good alternative to the sulphurization of base oils with elementary sulphur. In addition, Additin RC 2540 shows with increasing temperatures a steadily increasing active sulphur level (up to max. 38 %) resulting in an effective EP activity at only slightly elevated temperatures (50 to 60 °C). Additin RC 2540 can be successfully combined with other sulphur carriers such as Additin RC 2415 in order to increase EP activity.

The antiwear effect is improved by combination of Additin RC 2540 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 % b. w. RC 2540	+ 5 % b. w. RC 2540	+ 10 % b. w. RC 2540	+ 15 % b. w. RC 2540
Four-ball test (DIN 51350, part 2) weld load	600 - 700 N	2200 - 2400 N	2400 - 2600 N	2600 - 2800 N	2800 - 3000 N
Four-ball test (DIN 51350, part 3) 1 h/300 N scar diameter	0.70 mm	0.80 mm	1.00 mm	1.20 mm	1.50 mm
Four-ball test (ASTM D-2783) weld point LWI			320 kg 53 kg		
Load-carrying test according to Brugger load capacity	< 20 N/mm ²	approx. 65 N/mm ²	approx. 65 N/mm ²	approx. 65 N/mm ²	approx. 80 N/mm ²
Falex Pin and Vee ASTM D-2670-88 load value		3500 lbs	4500 lbs		

Packing unit

200 kg bung-hole drums

Storage conditions

Storage temperature: approx. 20 °C; protect from heat and frost!

Shelf life: approx. 12 months

Handling

Consult material safety data Sheet (MSDS)
for additional handling information on Additin RC 2540.

® = registered trade mark * The analytical data are guide values.



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