

End groups in RESOMER®

The specific end groups in the polymer series are generated by different chain length controllers.

Type	chain length controller	end group	comment
“H” (e.g. RG 502 H)	hydroxycarboxylic acid	free carboxylic acid	
“S” (e.g. RG 752 S)	alcohol	alkyl	
“ “ (e.g. RG 502)	hydroxycarboxylic acid ester	alkyl ester	For low molecular weight polymers
“ “ (e.g. LR 708)	oligomer	free carboxylic acid (not detectable)	For high molecular weight polymers

Analytical Method

We use a titration method to determine the acid value of low molecular weight polymers of the H-series. This allows to distinguish between “H” and “non-H”.

In addition, slight differences may be detected in the proton NMR-spectra at least in very low molecular weight polymers. In the spectra resonances with low intensity attributed to end groups are present.

¹H-NMR signal of the different end groups

