

*Citation:*

Cohen, N.H., On a- and Beta-amyrin from bresk, in:  
KNAW, Proceedings, 9 II, 1906-1907, Amsterdam, 1907, pp. 471

**Chemistry.** — “*On  $\alpha$ - and  $\beta$ -amyrin from bresk*”<sup>1)</sup>. By Dr. N. H. COHEN. (Communicated by Prof. VAN ROMBERGH).

(Communicated in the meeting of November 24, 1906).

Communications as to  $\beta$ -amyrin, which is present as acetate in “bresk” or “djelutung” have already been presented (These Proc. 1905, p. 544). Since then, I have prepared also  $\beta$ -amyrin cinnamate. This crystallises from acetone in small needles, which melt at 236,5° (corr. 241°).

In addition to  $\beta$ -amyrin and lupeol another substance was obtained from “bresk”, which proved to be identical with the  $\alpha$ -amyrin found by VESTERBERG.

This substance crystallises from alcohol in long, slender needles; m.p. 185° (corr. 186°). VESTERBERG gives the melting point as 181—181,5.

Found: C 84.22 84.30 calculated for  $C_{30}H_{50}O$  84.43  
 H 11.91 12.02 11.82

These, like all subsequent combustions have been made with lead chromate.

$[\alpha]_D = +82^{\circ},6$  in chloroform; in benzene was found  $[\alpha]_D = +88^{\circ},2$ ).

For the purpose of characterisation, different esters were prepared from  $\alpha$ -amyrin.

$\alpha$ -Amyrin acetate was obtained by heating with acetic anhydride and sodium acetate. Recrystallised from alcohol it forms needle-shaped leaflets; m.p. 220—221°, (corr. 224—225°). VESTERBERG gives the melting point as 221°.

Found: C 81.85 82.27 81.79, calculated for  $C_{32}H_{52}O_2$  81.98  
 H 11.34 11.40 11.33 11.19

$[\alpha]_D = +75^{\circ},8$  in chloroform.

$\alpha$ -Amyrin benzoate was obtained with the aid of benzoyl chloride and pyridine. From acetone it crystallised in long, prismatic needles; m.p. 192°, (corr. 195°). According to VESTERBERG it melts at 192°.

$\alpha$ -Amyrin cinnamate, which has not yet been described was obtained like the benzoate. When recrystallised repeatedly from acetone it forms small hard needles which melt at 176,5—177°, (corr. 178°).

*Utrecht. Org. Chem. Lab. Univ.*

1) For a more elaborate description see, Diss. N. H. COHEN. 1906, Utrecht.

2) VESTERBERG found in benzene  $[\alpha]_D = +91^{\circ},6$ .