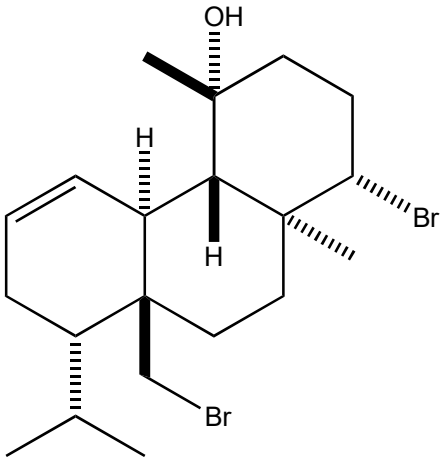
7302 (Miscellaneous)

Name: Bromosphaerol
Origin: *Sphaerococcus coronopifolius* (near Plomin, Yugoslavia)[(1)];
Sphaerococcus coronopifolius (the west coast of CorfuIsland Greece)[(2)];
Sphaerococcus coronopifolius (Berlenga Nature Reserve, Peniche, Portugal)[(3)];
Formula: $C_{20}H_{32}Br_2O_2$
Mol. Wt.: 448.28
Opt. Rot.: $[\alpha]_D$ +0.4 ($CHCl_3$)
Mp.: Oil



References and Notes

(1) De Rosa, S., De Stefano, S., Scarpelli, P., and Zavodnik, N. 1988. Phytochemistry, **27**, 1875-1878. Terpenes from the red alga *Sphaerococcus coronopifolius* of the north Adriatic Sea.
(**IR, ^{1}H-NMR, ^{13}C-NMR, MS**) (together with sphaeroxetane, sphaerococcenol A, bromosphaerol, alloaromadendrene)
(2) Smyrniotopoulos, V., Quesada, A., Vagias, C., Moreau, D., Roussakis, C., and Roussis, V. 2008. Tetrahedron, **64**, 5184-5190. Cytotoxic bromoditerpenes from the red alga *Sphaerococcus coronopifolius*.
(together with 3 new bromoditerpene, known diterpenes; 1-hydroperoxybromosphaerane I, bromosphaerodiol, 12*R*-hydroxybromosphaerol, 12*S*-hydroxybromosphaerol, bromosphaerol, sphaerococcenol A)
(3) Rodrigues, D., Alves, C., Horta, A., Pinteus, S., Silva, J., Culioli, G., Thomas, O. P., and Podrosa, R. 2015. Mar. Drugs, **13**, 713-726. Antitumor and antimicrobial potential of bromoditerpenes isolated from the red alga, *Sphaerococcus coronopifolius*. (**IR, ^{1}H-NMR, ^{13}C-NMR**)
(together with sphaerodactylomelol, bromosphaerol, 12*S*-hydroxybromosphaerol, 12*R*-hydroxybromosphaerol, sphaerococcenol A)
(4) **Antifouling activity**; (a) Prousis, K. C., Kikionis, S., Ioannou, E., Morgana, S., Faimali, M., Piazza, V., Calogeropoulou, and Roussis, V. 2022. Mar. Drugs, **20**, (1) 7. Synthesis and antifouling activity evaluation of analogs of bromosphaerol, a brominated diterpene isolated from the red alga *Sphaerococcus coronopifolius*.; (b) Quemener, M., Kikionis, S., Fauchon, M., Toueix, Y., Aulanier, F., Makris, A. M., Roussis, V., Ioannou, E., and Hellio, C. 2022. Mar. Drugs, **20**, (1) 32. Antifouling activity of halogenated compounds derived from the red alga *Sphaerococcus coronopifolius*: Potential for the development of environmentally friendly solutions.