

ABSTRACT **METHOD FOR PREPARING 2-HYDROXYBUTYROLACTONE**

5 The invention relates to a method for preparing 2-hydroxybutyrolactone (2HBL) from a compound or its salt or its oligomers, said compound fitting formula (I)



Wherein

10 R₁ represents H

 R₂ represents a group selected from OH; OR₄ and OCOR₄ wherein R₄ represents a group selected from linear, cyclic, alicyclic or branches alkyl groups having from 1 to 10 carbon atoms, and aryl groups having from 6 to 10 carbon atoms, optionally substituted with substituent(s)
 15 selected from linear or branched alkyl groups having from 1 to 10 carbon atoms, halogens and hydroxyl, amino, nitro and alkoxy groups having from 1 to 10 carbon atoms; and OSiRR'R'' wherein R, R' and R'' are selected independently of each other from linear, cyclic, alicyclic or branched alkyl groups having from 1 to 10 carbon atoms, aryl groups having from 6 to 10
 20 carbon atoms, optionally substituted with substituent(s) selected from linear or branched alkyl groups having from 1 to 10 carbon atoms, or R₁ and R₂ represent together =O,

 R₃ represents COOH or a COOR₅ group wherein R₅ represents a group selected from linear, cyclic, alicyclic or branched alkyl groups having
 25 from 1 to 10 carbon atoms, benzyl groups and benzyl groups substituted with one or two substituents selected from linear or branched alkyl groups having from 1 to 10 carbon atoms, halogens and hydroxyl, amino, nitro and alkoxy groups having from 1 to 10 carbon atoms, or R₃ represents a cyano group,

 method according to which

30 a sulfonium of said compound is obtained, said sulfonium fitting the formula (II)



 wherein R₁, R₂ and R₃ have the above definition, and R₆ and R₇ are selected independently of each other from H, linear, cyclic, alicyclic or
 35 branched alkyl groups having from 1 to 10 carbon atoms, and aryl groups having from 6 to 10 carbon atoms, optionally substituted with substituent(s)

selected from linear or branched alkyl groups having from 1 to 10 carbon atoms, halides and hydroxyl, amino, nitro and alkoxy groups having from 1 to 10 carbon atoms; R⁸ is selected from H, linear, cyclic, alicyclic or branched alkyl groups having from 1 to 10 carbon atoms, aryl groups having from 6 to 10 carbon atoms, optionally substituted with substituent(s) selected from linear or branched alkyl groups having from 1 to 10 carbon atoms, and attractor groups notably those comprising a function selected from acid, ester, cyano functions and X represents a counter-ion, and

the thereby obtained sulfonium is hydrolyzed and

2,4-dihydroxybutyric acid or its salt is cyclized into 2-hydroxybutyrolactone.

No Figure.