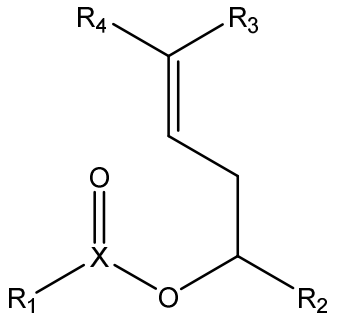
Claims

1. Use of a compound according to formula (I)



(I)

as fragrance precursor

wherein

X is selected from C and S(=O);

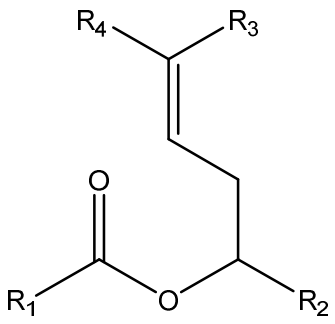
R_1 is selected from the group consisting of linear or branched C_1 – C_{11} alkyl; methoxy; ethoxy; phenyl with up to five substituents independently selected from methyl, ethyl, methoxy, ethoxy; naphthyl with up to four substituents independently selected from methyl, ethyl, methoxy, ethoxy; 1-naphthyl-methyl with up to two substituents independently selected from methyl, ethyl, methoxy, ethoxy; 1-(2-naphthyl)-eth-1-yl with up to two substituents independently selected from methyl, ethyl, methoxy, ethoxy; dialkylamines $–NR_5R_6$, with R_5 and R_6 being independently selected from the group consisting of C_1 – C_4 alkyl;

R_2 is selected from the group consisting of linear C_7 – C_{10} alkyl and linear C_7 – C_{10} alkenyl with a terminal CC double bond;

R_3 is selected from the group consisting of H, Me, Et, phenyl, 2-naphthyl, 4-methoxyphenyl; and

R_4 is selected from the group consisting of H and Me.

2. The use according to claim 1, wherein the compound of formula (I) is the compound according to formula (Ia)



(Ia)

as fragrance precursor

wherein

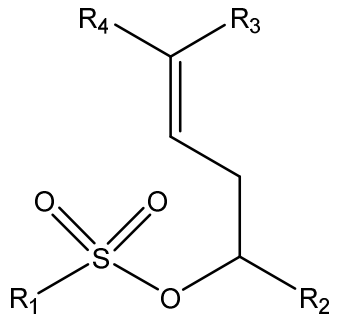
R_1 is selected from the group consisting of linear or branched C_1 – C_{11} alkyl; methoxy; ethoxy; phenyl with up to five substituents independently selected from methyl, ethyl, methoxy, ethoxy; naphthyl with up to four substituents independently selected from methyl, ethyl, methoxy, ethoxy; 1-naphthyl-methyl with up to two substituents independently selected from methyl, ethyl, methoxy, ethoxy; 1-(2-naphthyl)-eth-1-yl with up to two substituents independently selected from methyl, ethyl, methoxy, ethoxy; dialkylamines $–NR_5R_6$, with R_5 and R_6 being independently selected from the group consisting of C_1 – C_4 alkyl;

R_2 is selected from the group consisting of linear C_7 – C_{10} alkyl and linear C_7 – C_{10} alkenyl with a terminal CC double bond;

R_3 is selected from the group consisting of H, Me, Et, phenyl, 2-naphthyl, 4-methoxyphenyl; and

R_4 is selected from the group consisting of H and Me.

3. The use according to claim 1, wherein the compound of formula (I) is the compound according to formula (Ib)



(Ib)

as fragrance precursor

wherein

R_1 is selected from the group consisting of linear or branched C_1 – C_{11} alkyl; methoxy; ethoxy; phenyl with up to five substituents independently selected from methyl, ethyl, methoxy, ethoxy; naphthyl with up to four substituents independently selected from methyl, ethyl, methoxy, ethoxy; 1-naphthyl-methyl with up to two substituents independently selected from methyl, ethyl, methoxy, ethoxy; 1-(2-naphthyl)-eth-1-yl with up to two substituents independently selected from methyl, ethyl, methoxy, ethoxy;

dialkylamines $–NR_5R_6$, with R_5 and R_6 being independently selected from the group consisting of C_1 – C_4 alkyl;

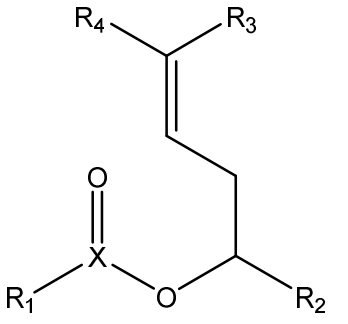
R_2 is selected from the group consisting of linear C_7 – C_{10} alkyl and linear C_7 – C_{10} alkenyl with a terminal CC double bond;

R_3 is selected from the group consisting of H, Me, Et, phenyl, 2-naphthyl, 4-methoxyphenyl; and

R_4 is selected from the group consisting of H and Me.

4. The use according to claim 1, wherein the compound according to formula (I) is selected from the group consisting of tetradeca-1,13-dien-4-yl acetate, tetradec-1-en-4-yl acetate, tridec-1-en-4-yl acetate, tetradec-1-en-4-yl benzoate, tridec-1-en-4-yl benzoate, tetradeca-1,13-dien-4-yl benzoate, tetradeca-1,13-dien-4-yl 2-naphthoate, tridec-1-en-4-yl 2-naphthoate, tetradec-1-en-4-yl 2-naphthoate, tetradec-1-en-4-yl 2-(naphthalen-1-yl)acetate, tridec-1-en-4-yl 2-(naphthalen-1-yl)acetate, tetradeca-1,13-dien-4-yl 2-(naphthalen-1-yl)acetate, tridec-1-en-4-yl 2-methylundecanoate, tetradec-1-en-4-yl 2-methylundecanoate, tetradec-1-en-4-yl dimethylcarbamate, methyl tetradec-1-en-4-yl carbonate, pentadec-3-en-6-yl acetate, pentadec-3-en-6-yl benzoate, tridec-1-en-4-yl 3,4,5-trimethoxybenzoate, tetradec-1-en-4-yl 3,4,5-trimethoxybenzoate, undec-1-en-4-yl benzoate, dodec-1-en-4-yl benzoate, tetradeca-1,13-dien-4-yl methanesulfonate and tetradeca-1,13-dien-4-yl 4-methylbenzenesulfonate.

5. A compound according to formula (I)



(I)

wherein

X is selected from C and S(=O);

R_1 is selected from the group consisting of linear or branched C_1 – C_{11} alkyl; methoxy; ethoxy; phenyl with up to five substituents independently selected from methyl, ethyl, methoxy, ethoxy; naphthyl with up to four substituents independently selected from

methyl, ethyl, methoxy, ethoxy; 1-naphthyl-methyl with up to two substituents independently selected from methyl, ethyl, methoxy, ethoxy; 1-(2-naphthyl)-eth-1-yl with up to two substituents independently selected from methyl, ethyl, methoxy, ethoxy; dialkylamines $–NR_5R_6$, with R_5 and R_6 being independently selected from the group consisting of $C_1 – C_4$ alkyl;

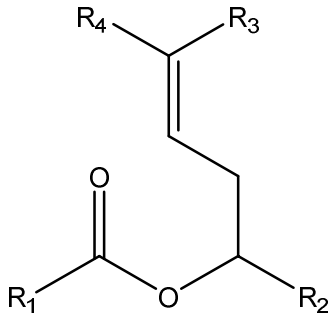
R_2 is selected from the group consisting of linear $C_7 – C_{10}$ alkyl and linear $C_7 – C_{10}$ alkenyl with a terminal CC double bond;

R_3 is selected from the group consisting of H, Me, Et, phenyl, 2-naphthyl, 4-methoxyphenyl; and

R_4 is selected from the group consisting of H and Me,

with the proviso, that the compound is not tetradec-1-en-4-yl acetate, tridec-1-en-4-yl acetate, tetradeca-1,13-dien-4-yl acetate, undec-1-en-4-yl benzoate, undec-1-en-4-yl pivalate, and undec-1-en-4-yl acetate, methyl undec-1-en-4-yl carbonate, dodeca-1,11-dien-4-yl acetate, dodec-1-en-4-yl acetate.

6. The compound according to claim 5, wherein the compound of formula (I) is the compound according to formula (Ia)



(Ia)

wherein

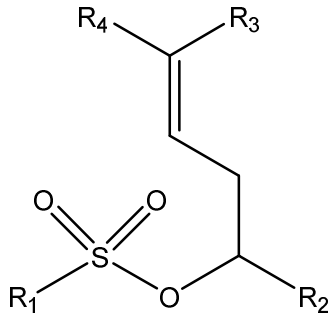
R_1 is selected from the group consisting of linear or branched $C_1 – C_{11}$ alkyl; methoxy; ethoxy; phenyl with up to five substituents independently selected from methyl, ethyl, methoxy, ethoxy; naphthyl with up to four substituents independently selected from methyl, ethyl, methoxy, ethoxy; 1-naphthyl-methyl with up to two substituents independently selected from methyl, ethyl, methoxy, ethoxy; 1-(2-naphthyl)-eth-1-yl with up to two substituents independently selected from methyl, ethyl, methoxy, ethoxy; dialkylamines $–NR_5R_6$, with R_5 and R_6 being independently selected from the group consisting of $C_1 – C_4$ alkyl;

R_2 is selected from the group consisting of linear $C_7 – C_{10}$ alkyl and linear $C_7 – C_{10}$ alkenyl with a terminal CC double bond;

R_3 is selected from the group consisting of H, Me, Et, phenyl, 2-naphthyl, 4-methoxyphenyl; and

R_4 is selected from the group consisting of H and Me.

7. The compound according to claim 5, wherein the compound of formula (I) is the compound according to formula (Ib)



(Ib)

wherein

R_1 is selected from the group consisting of linear or branched $C_1 – C_{11}$ alkyl; methoxy; ethoxy; phenyl with up to five substituents independently selected from methyl, ethyl, methoxy, ethoxy; naphthyl with up to four substituents independently selected from methyl, ethyl, methoxy, ethoxy; 1-naphthyl-methyl with up to two substituents independently selected from methyl, ethyl, methoxy, ethoxy; 1-(2-naphthyl)-eth-1-yl with up to two substituents independently selected from methyl, ethyl, methoxy, ethoxy; dialkylamines $–NR_5R_6$, with R_5 and R_6 being independently selected from the group consisting of $C_1 – C_4$ alkyl;

R_2 is selected from the group consisting of linear $C_7 – C_{10}$ alkyl and linear $C_7 – C_{10}$ alkenyl with a terminal CC double bond;

R_3 is selected from the group consisting of H, Me, Et, phenyl, 2-naphthyl, 4-methoxyphenyl; and

R_4 is selected from the group consisting of H and Me

8. The compound according to claim 5, wherein the compound of formula (I) is selected from the group consisting of tetradec-1-en-4-yl benzoate, tridec-1-en-4-yl benzoate, tetradeca-1,13-dien-4-yl benzoate, tetradeca-1,13-dien-4-yl 2-naphthoate, tridec-1-en-4-yl 2-naphthoate, tetradec-1-en-4-yl 2-naphthoate, tetradec-1-en-4-yl 2-(naphthalen-1-yl)acetate, tridec-1-en-4-yl 2-(naphthalen-1-yl)acetate, tetradeca-1,13-dien-4-yl 2-

(naphthalen-1-yl)acetate, tridec-1-en-4-yl 2-methylundecanoate, tetradec-1-en-4-yl 2-methylundecanoate, tetradec-1-en-4-yl dimethylcarbamate, methyl tetradec-1-en-4-yl carbonate, pentadec-3-en-6-yl acetate, pentadec-3-en-6-yl benzoate, tridec-1-en-4-yl 3,4,5-trimethoxybenzoate, tetradec-1-en-4-yl 3,4,5-trimethoxybenzoate, dodec-1-en-4-yl benzoate, tetradeca-1,13-dien-4-yl methanesulfonate and tetradeca-1,13-dien-4-yl 4-methylbenzenesulfonate.

9. A fragrance composition comprising at least one compound according to formula (I) as defined in claim 1.

10. A consumer product comprising at least one compound according to formula (I) as defined in claim 1 and a consumer product base.

11. The consumer product according to claim 10 wherein the consumer product is selected from home care and personal care products.

12. A method to release a fragrance from a compound according to formula (I) as defined in claim 1, wherein said compound is exposed to an environmental trigger.

13. A method of making a compound according to formula (I) as defined in claim 1, comprising the steps of:
a) reacting an aldehyde with allylmagnesium chloride, and
b) reacting the resulting product with acyl anhydride or chloride or sulfonyl chloride, wherein steps a) and b) are performed as a one pot reaction.

14. A method to confer, enhance, improve or modify the hedonic properties of a fragrance composition or a consumer product, which method comprises adding to said composition or consumer product at least one compound according to formula (I) as defined in claim 1.

15. The method according to claim 14, wherein said at least one compound is exposed to an environmental trigger.