

ECLA EUROPEAN CLASSIFICATION

C11B PRODUCING (pressing, extraction), REFINING AND PRESERVING FATS, FATTY SUBSTANCES (e.g. lanolin), FATTY OILS AND WAXES, INCLUDING EXTRACTION FROM WASTE MATERIALS; ESSENTIAL OILS; PERFUMES (drying-oils C09F)

[N: **Note**

In this subclass, boron and silicon are considered as metals
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C11B1/00 Production of fats or fatty oils from raw materials

- C11B1/02 . Pretreatment
- C11B1/02B . . [N: by enzymes or microorganisms, living or dead]
- C11B1/04 . . of vegetable raw material [N: ([C11B1/02B](#) takes precedence)]
- C11B1/06 . by pressing
- C11B1/08 . . by hot pressing
- C11B1/10 . by extracting
- C11B1/10B . . [N: in counter-current; utilisation of an equipment wherein the material is conveyed by a screw]
- C11B1/10C . . using super critical gases or vapours
- C11B1/10D . . [N: using ultra-sounds]
- C11B1/10F . . [N: after-treatment, e.g. of miscellae]
- C11B1/12 . by melting out
- C11B1/14 . . with hot water or aqueous solutions
- C11B1/16 . . with steam

C11B3/00 Refining fats or fatty oils

- C11B3/00B . [N: by a combination of two or more of the means hereafter]
- C11B3/00C . [N: by enzymes or microorganisms, living or dead]
- C11B3/00D . [N: by wave energy or electric current, e.g. electro dialysis]
- C11B3/00E . [N: by extraction]
- C11B3/00F . [N: by filtration, e.g. including ultra filtration, dialysis ([C11B3/00D](#) takes precedence)]
- C11B3/02 . by chemical reaction [N: ([C11B3/00C](#) takes precedence)]
- C11B3/04 . . with acids
- C11B3/06 . . with bases

C11B3/08 . . with oxidising agents

C11B3/10 . by adsorption

Note

[N0408] When classifying in this group, classification is also made in group [B01D15/08](#) insofar as subject matter of general interest relating to chromatography is concerned.

C11B3/12 . by distillation

C11B3/14 . . with the use of indifferent gases or vapours, e.g. steam

C11B3/16 . by mechanical means

C11B5/00 Preserving by using additives, e.g. anti-oxidants

[N: **Note**

In groups [C11B5/00B](#) to [C11B5/00S](#), in the absence of an indication to the contrary, a composition is classified in the last appropriate place

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C11B5/00B . [N: Organic substances]

C11B5/00D . [N: Hydrocarbons]

C11B5/00F . [N: containing oxygen]

C11B5/00F2 . . [N: Carboxylic acids; Their derivatives]

C11B5/00F4 . . [N: Phenols; Their halogenated and aminated derivatives, their salts, their esters with carboxylic acids]

C11B5/00H . [N: containing nitrogen]

C11B5/00H2 . . [N: Amines or imines ([C11B5/00F4](#) takes precedence)]

C11B5/00H4 . . [N: Amides or imides]

C11B5/00H6 . . [N: Heterocyclic compounds containing nitrogen in the ring]

C11B5/00K . [N: containing halogens, sulfur or phosphorus (**halogenated phenols** [C11B5/00F4](#))]

C11B5/00M . [N: Metal hydrides or organo-metallic compounds, i.e. organic compounds containing a metal-to-carbon link]

C11B5/00P . [N: Substances of natural origin of unknown constitution, f.i. plant extracts]

C11B5/00S . [N: Mixtures]

C11B7/00 Separation of mixtures of fats or fatty oils into their constituents, e.g. saturated oils from unsaturated oils

[N: **Note**

In groups [C11B7/00B](#) to [C11B7/00E](#), in the absence of an indication to the contrary an invention is classified in the last appropriate place

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- C11B7/00B . [N: by differences of solubilities, e.g. by extraction, by separation from a solution by means of anti-solvents (addition of a minor amount of solvent intended to lower the melting point [C11B7/00D](#), [C11B7/00F](#))]
- C11B7/00B2 . . [N: in hydrocarbons or halogenated hydrocarbons (in pressure liquefied gases [C11B7/00B14](#))]
- C11B7/00B4 . . [N: in solvents containing oxygen in their molecule]
- C11B7/00B10 . . [N: in solvents containing other heteroatoms in their molecule]
- C11B7/00B12 . . [N: in mixtures of individualized solvents (water is not taken into account)]
- C11B7/00B14 . . [N: in solvents used at superatmospheric pressures]
- C11B7/00B16 . . [N: in solvents or mixtures of solvents of different natures or compositions used in succession]
- C11B7/00B18 . . [N: between two or more non-miscible solvent phases]
- C11B7/00C . [N: by differences of melting or solidifying points]
- C11B7/00D . [N: with addition of auxiliary substances, e.g. crystallisation promoters, filter aids, melting point depressors, (if a characterised solution is formed [C11B7/00B](#))]
- C11B7/00F . [N: non-solvents, e.g. water wherein the fat or oil is dispersed account a more washing out of fractions is not taken into]

C11B9/00 **Essential oils; Perfumes** (synthesis of chemical substances [C07](#))

- C11B9/00A . [N: Compounds of unspecified constitution defined by the chemical reaction for their preparation]
- C11B9/00B . [N: Aliphatic compounds]
- C11B9/00B2 . . [N: containing S]
- C11B9/00B4 . . [N: containing oxygen as the only heteroatom]
- C11B9/00B4B . . . [N: carbocyclic acids; Salts or esters thereof]
- C11B9/00B6 . . [N: containing nitrogen as the only heteroatom]
- C11B9/00D . [N: compounds containing an alicyclic ring not condensed with another ring]
- C11B9/00D2 . . [N: the ring containing less than six carbon atoms]
- C11B9/00D4 . . [N: the ring containing six carbon atoms]
- C11B9/00D6 . . [N: the ring containing more than six carbon atoms]
- C11B9/00E . [N: compounds containing condensed hydrocarbon rings]
- C11B9/00E2 . . [N: containing only two condensed rings]
- C11B9/00E2B . . . [N: the condensed rings sharing two common C atoms]
- C11B9/00E2B2 [N: both rings being six-membered]
- C11B9/00E2D . . . [N: Spiro compounds]
- C11B9/00F . [N: compounds containing a six-membered aromatic ring not condensed with another ring]
- C11B9/00F2 . . [N: Nitriles]
- C11B9/00H . [N: Heterocyclic compounds]

- C11B9/00H2 . . [N: containing only O or S as heteroatoms]
- C11B9/00H2A . . . [N: the hetero rings containing less than six atoms] [N9706]
- C11B9/00H2B . . . [N: the hetero rings containing six atoms] [N9706]
- C11B9/00H2C . . . [N: the hetero rings containing more than six atoms] [N9706]
- C11B9/00H2D . . . [N: Spiro compounds] [N9609]
- C11B9/00H4 . . [N: containing only N as heteroatom]
- C11B9/00H6 . . [N: containing at least two different heteroatoms, at least one being nitrogen]

- C11B9/02 . Recovery or refining of essential oils from raw materials
- C11B9/02B . . [N: Refining]
- C11B9/02E . . [N: Recovery by solvent extraction]
- C11B9/02H . . [N: Recovery of volatiles by distillation or stripping]

- C11B11/00** **Recovery or refining of other fatty substances, e.g. lanolin, waxes** ([synthetic waxes C07](#), [C08](#); [mineral waxes C10G](#))

- C11B11/00B . [N: Lanolin; Woolfat]

- C11B13/00** **Recovery of fats, fatty oils, or fatty acids from waste materials** ([mechanical separation from waste water C02F](#), [E03F](#))

- C11B13/00B . [N: of residues of the fabrication of wood-cellulose (in particular tall-oil)]
- C11B13/02 . from soap stock
- C11B13/04 . from spent adsorption materials

- C11B15/00** **Solidifying fatty oils, fats, or waxes by physical processes**