

A23D

EDIBLE OILS OF FATS, e.g. MARGARINES, SHORTENINGS, COOKING OILS (animal feeding-stuffs A23K1/00; foods or foodstuffs containing edible oils or fats A21D, A23C, A23G, A23L; obtaining, refining, preserving C11B, C11C; hydrogenation C11C3/12)

Definition statement

This subclass/group covers:

- Edible oil or fat compositions containing an aqueous phase, e.g. margarines, and their working-up and the preservation of finished products
- Other edible oils or fats, e.g. shortenings, cooking oils, microbial oils and their working-up and the preservation of finished products
- The [A23D](#) subclass covers water and oil compositions, generally emulsions, which are suitable for use in foods. Additionally covered are methods for manufacturing and preserving same. Distinction is made between the use of the emulsion, a large part of the class being taken up by spread compositions (generally water in oil emulsions). Other non-spread compositions include mayonnaises (generally water in oil emulsions), dressings, etc. No classification distinction is made between emulsion types.

Relationship between large subject matter areas

- Foods or foodstuffs containing edible oils or fats are classified in the relevant parts [A21D](#), [A23G](#), [A23L](#). Fats derived from milk are classified in [A23C](#) (e.g. [A23C 13/00](#) and [A23C 15/00](#)).
- [C07C](#) covers acyclic and carbocyclic compounds, e.g. esters of carboxylic acids ([C07C 69/00](#)), but not their use in food stuff which is covered by [A23D](#).
- [C11B](#) covers the production and purification/refining of oils and fats as well as their recovery from waste material, but not limited to those oils and fats which are suitable for use in foodstuffs. [C11B](#) does not cover mixtures of fats or oils with water or other edible oils or fats, which are covered by [A23D](#).
- [C11C](#) covers fatty acids that are not or no longer esterified with glycerol (although the process or esterification of said fatty acids with glycerol is covered) and their modifications, as well as candles.
- [A23L 1/29](#) covers food with modified nutritive qualities, e. g. dietetic food, functional food.

Informative references

Attention is drawn to the following places, which may be of interest for search:

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| Animal-feeding stuff | A23K 1/00 |
| Use of substance as emulsifying, wetting, dispersing or foam producing agents | B01F 17/00 |
| Mineral oil (kerosene, paraffin waxes, petroleum, gasoline, diesel. etc.), biodiesel | C10 |
| Preparation of fats or fatty oils by using microorganism or enzymes | C12P 7/64 |
| Investigating or analyzing edible oils or fats by specific methods | G01N 33/03 |

Glossary of terms

In this subclass/group, the following terms (or expressions) are used with the meaning indicated:

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| Oil | An oil is a substance that is in a viscous liquid state ("oily") at ambient temperatures or slightly warmer, and is both hydrophobic (immiscible with water) and lipophilic (miscible with other oils, literally). This general definition includes compound classes with otherwise unrelated chemical structures, properties, and uses, including vegetable oils, petrochemical oils, and volatile essential oils. Oil is a nonpolar substance. The word "oil" is used for any substance that does not mix with water and has a greasy feel, such as petroleum (or crude oil) and heating oil, regardless of its chemical structure. |
| Edible oil | Edible or cooking oil is fat of plant, animal or microbial origin, which is liquid at room temperature and is suitable for food use. Some of the |

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| | <p>many different kinds of edible vegetable oils include: olive oil, palm oil, soybean oil, canola oil, pumpkin seed oil, corn oil, sunflower oil, safflower oil, peanut oil, grape seed oil, sesame oil, argan oil and rice bran oil. Many other kinds of vegetable oils are also used for cooking. The generic term "vegetable oil" when used to label a cooking oil product refers to a blend of a variety of oils often based on palm, corn, soybean or sunflower oils. Edible oil of animal origin is e.g. fish oil. Microbial oil are also encompassed.</p> |
| Fats | <p>Fats consist of a wide group of compounds that are generally soluble in organic solvents and largely insoluble in water. Chemically, fats are generally triesters of glycerol and fatty acids. Fats may be either solid or liquid at normal room temperature, depending on their structure and composition. Although the words "oils", "fats", and "lipids" are all used to refer to fats, "oils" is usually used to refer to fats that are liquids at normal room temperature, while "fats" is usually used to refer to lipids which are solids at normal room temperature. "Lipids" is used to refer to both liquid and solid fats, along with other related substances. Fats form a category of lipid, distinguished from other lipids by their chemical structure and physical properties. This category of molecules is important for many forms of life, serving both structural and metabolic functions. They are an important part of the diet of most heterotrophs (including humans). Fats or lipids are broken down in the body by enzymes called lipases produced in the pancreas.</p> |
| Shortening | <p>Shortening is a fat used in food preparation, especially baked goods, and is so called because it promotes a "short" or crumbly texture (as in</p> |

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| | <p>shortbread). The term "shortening" can be used more broadly to apply to any fat that is used for baking and which is solid at room temperature, such as lard, but as used in recipes it refers to a hydrogenated vegetable oil that is solid at room temperature. Shortening generally has a higher smoke point than butter and margarine, and it may have 100% fat content, compared to about 80% for butter and margarine.</p> |
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Edible emulsions.

Non-specified use of composition characterized by triglycerides.

A23D 7/00

Edible oil or fat compositions containing an aqueous phase, e.g. margarines

A23D 7/001

[N: Spread compositions (characterised by ingredients other than fatty acid triglycerides A23D7/0056)]

Definition statement

This subclass/group covers:

Spreads characterised by their triglycerides

A23D 7/003

[N: Compositions other than spreads (characterised by ingredients other than fatty acid triglycerides A23D7/0053)]

Definition statement

This subclass/group covers:

Non-Spreads characterised by their Triglycerides

A23D 7/005

characterised by ingredients other than fatty acid triglycerides

Definition statement

This subclass/group covers:

Non-specified use characterized by non-triglyceride non-ester ingredients

A23D 7/0053

[N: Compositions other than spreads]

Definition statement

This subclass/group covers:

Non-spreads characterised by other components (e.g. proteins, starches, etc.)

A23D 7/0056

[N: Spread compositions]

Definition statement

This subclass/group covers:

Spreads characterised by other components (e.g. proteins, starches, etc.)

A23D 7/01

Other fatty acid esters, e.g. phosphatides

Definition statement

This subclass/group covers:

Non-specified use characterized by non-triglyceride ester ingredients including mono- and diglycerides (e.g. lecithins, glycerides but not triglycerides.)

A23D 7/011

[N: Compositions other than spreads]

Definition statement

This subclass/group covers:

Non-spreads characterised by fatty acid esters (e.g. lecithins, glycerides but not triglycerides.)

A23D 7/013

[N: Spread compositions]

Definition statement

This subclass/group covers:

Spreads characterised by fatty acid esters (e.g. lecithins, glycerides but not triglycerides.)

A23D 7/015

Reducing calorie content; Reducing fat content, [N: e.g. "halvarines"]

Definition statement

This subclass/group covers:

Compositions characterized by lowering fat etc. such as halvarines

A23D 7/02

characterized by the production or working-up [N: (kneading, forming A01J21/00)]

Definition statement

This subclass/group covers:

Compositions characterised by general production methods imparting properties to final product

A23D 7/04

Working-up

Definition statement

This subclass/group covers:

Working up procedures specified

A23D 7/05

characterised by essential cooling

Definition statement

This subclass/group covers:

Compositions characterised by use of cooling procedures (e.g. votators, crystallisers)

A23D 7/06

Preservation of finished products [N: (by using antioxidants or biocides C11B5/00)]

Definition statement

This subclass/group covers:

Compositions characterised by preservation methods/ingredients (e.g. salting, water activity control, etc.)

A23D 9/00

Other edible oils or fats, e.g. shortenings, cooking oils

Definition statement

This subclass/group covers:

Oils or fats suitable for food use (incl. genetically modified) characterized by their triglyceride composition

A23D 9/007

characterised by ingredients other than fatty acid triglycerides

Definition statement

This subclass/group covers:

Oils or fats suitable for food use (incl. genetically modified) characterized by non-ester, non-triglyceride ingredients

A23D 9/013

Other fatty acid esters, e.g. phosphatides

Definition statement

This subclass/group covers:

Oils or fats suitable for food use (incl. genetically modified) characterized by the non-triglyceride ester ingredients

A23D 9/02

characterised by the production or working-up

Definition statement

This subclass/group covers:

Compositions characterised by general production methods imparting properties to final product

A23D 9/04

Working-up

Definition statement

This subclass/group covers:

Working up procedures specified

Oil compositions characterised by their production method

A23D 9/05

Forming free-flowing pieces

Definition statement

This subclass/group covers:

characterized by process which forms free flowing pieces including by coating, chilling etc.