### **A23D**

EDIBLE OILS OR FATS, e.g. MARGARINES, SHORTENINGS OR COOKING OILS (preservation thereof A23B 20/00; production, refinement or preservation of animal or vegetable fats or oils C11B, C11C)

### **Definition statement**

This place covers:

- Edible oil or fat compositions containing an aqueous phase, e.g. margarines and their working-up.
- · Other edible oils or fats, e.g. shortenings, cooking oils or microbial oils, and their working-up.
- Water and oil compositions, generally emulsions, that are suitable for use in foods. Additionally covered are processes for manufacturing.
- Spread compositions (generally water in oil emulsions), which constitute a large part of the subclass.
- Other non-spread compositions, which include mayonnaises (generally water in oil emulsions) or dressings, with no classification distinctions being made among emulsion types.

## Relationships with other classification places

- Foods or foodstuffs containing edible oils or fats are classified in the relevant parts of subclasses <u>A21D</u>, <u>A23G</u> and <u>A23L</u>. Fats derived from milk are classified in subclass <u>A23C</u> (e.g. in groups <u>A23C 13/00</u> and <u>A23C 15/00</u>).
- Subclass <u>C07C</u> covers acyclic and carbocyclic compounds, e.g. esters of carboxylic acids (<u>C07C 69/00</u>), but not their use in foodstuffs, which is covered by subclass <u>A23D</u>.
- Subclass <u>C11B</u> covers the production and purification/refining of oils and fats as well as their
  recovery from waste material, but is not limited to those oils and fats that are suitable for use in
  foodstuffs. Subclass <u>C11B</u> does not cover mixtures of fats or oils with water or other edible oils or
  fats, which are covered by subclass <u>A23D</u>.
- Subclass <u>C11C</u> covers fatty acids that were never or are 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.
- Group A23L 33/00 covers food with modified nutritive qualities, e.g. dietetic food or functional food.

### References

## Limiting references

This place does not cover:

Preservation of edible oils or fats	A23B 20/00
Producing, refining or preserving fats or fatty substances	<u>C11B</u>
Fatty acids obtained from fats, oils or waxes	<u>C11C</u>

#### Informative references

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

Animal feeding-stuffs	A23K 10/00
Use of substances as emulsifying, wetting, dispersing or foam producing agents	C09K 23/00
Mineral oil (kerosene, paraffin waxes, petroleum, gasoline or diesel) or biodiesel	<u>C10</u>
Preparation of fats or fatty oils by using microorganism or enzymes	C12P 7/64

Investigating or analysing edible oils or fats by specific methods	G01N 33/03

# **Glossary of terms**

In this place, the following terms or expressions are used with the meaning indicated:

oil	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). 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 term "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 that is a fat of plant, animal or microbial origin, is liquid at room temperature and is suitable for food use. Some of the 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 expression "vegetable oil" when used to characterise an oil-based cooking product, refers to a blend of a variety of oils often based on palm, corn, soybean or sunflower oils. Fish oil is an example of an edible oil of animal origin. Microbial oils are also included in this category.
fat	unctuous substance of little consistency that melts easily, known in chemistry as body fat and present in various parts of the human or animal body. 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 that are solids at normal room temperature. The term "lipids" is used to refer to both liquid and solid fats, along with other related substances. Fats form a category of lipids that are 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.
shortening	fat that is used in food preparation, especially baked goods, and is called shortening because it promotes a "short" or crumbly texture (as in shortbread). The term "shortening" can be used more broadly to apply to any fat that is used for baking and that 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.

Glossary of terms

Edible emulsions.

Non-specified use of composition characterized by triglycerides.

## **Synonyms and Keywords**

In patent documents, the following words/expressions are often used as synonyms:

• "freeze-drying" and "lyophilisation"

### A23D 7/001

{Spread compositions (characterised by ingredients other than fatty acid triglycerides A23D 7/0056)}

## **Definition statement**

This place covers:

Spreads characterised by their triglycerides

### A23D 7/003

{Compositions other than spreads (characterised by ingredients other than fatty acid triglycerides A23D 7/0053)}

### **Definition statement**

This place covers:

Non-Spreads characterised by their Triglycerides

### A23D 7/005

## characterised by ingredients other than fatty acid triglycerides

### **Definition statement**

This place covers:

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

## A23D 7/0053

# (Compositions other than spreads)

### **Definition statement**

This place covers:

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

## A23D 7/0056

## {Spread compositions}

### **Definition statement**

This place covers:

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

## A23D 7/01

## Other fatty acid esters, e.g. phosphatides

### **Definition statement**

This place covers:

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

## A23D 7/011

# (Compositions other than spreads)

### **Definition statement**

This place covers:

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

### A23D 7/013

# {Spread compositions}

## **Definition statement**

This place covers:

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

### A23D 7/015

# Reducing calorie content; Reducing fat content {, e.g. "halvarines"}

### **Definition statement**

This place covers:

Compositions characterized by lowering fat etc. such as halvarines

## A23D 7/02

# characterised by the production or working-up {(kneading, forming A01J 21/00)}

### **Definition statement**

This place covers:

Compositions characterised by general production methods imparting properties to final product

## A23D 7/04

## Working-up

## **Definition statement**

This place covers:

Working up procedures specified

## A23D 7/05

## characterised by essential cooling

### **Definition statement**

This place covers:

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

### A23D 9/00

# Other edible oils or fats, e.g. shortenings or cooking oils (preservation of other edible oils A23B 20/30)

## **Definition statement**

This place covers:

Oils or fats suitable for food use (including genetically modified) and characterised by their trigylceride composition.

#### References

## Limiting references

This place does not cover:

Preservation of other edible oils  A23B 20/30
---

## A23D 9/007

## characterised by ingredients other than fatty acid triglycerides

## **Definition statement**

This place covers:

Olls 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 place covers:

Olls 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 place covers:

Compositions characterised by general production methodswhich lead to an oil/fat with a particular composition/form , e.g. olive oils with high antioxidants levels obtained from a second pressing or cold pressing of oils in general.

## A23D 9/04

## Working-up

## **Definition statement**

This place covers:

Compositions characterised by specific production methods which lead to an oil/fat with a particular composition/form, e.g. olive oily with high antioxidant level obtained from a second pressing using extrusion or cold pressing in an extruder.

### A23D 9/05

# Forming free-flowing pieces

### **Definition statement**

This place covers:

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