Description

Title of Invention: CHOCOLATE

Technical Field

[0001]

Related Application

This application claims the benefit of priority from Japanese Patent Application No. 2024-029560 filed on February 29, 2024. The priority application is incorporated herein by reference in its entirety.

[0002]

The present invention relates to a chocolate, and more particularly to a chocolate containing randomly interesterified oil.

Background Art

[0003]

In addition to being used alone, a chocolate is often used in combination with other foods, such as breads, cakes, confectioneries, and frozen confectioneries, and is used for foods in a wide variety of forms. According to such forms for use, various functions are required for a chocolate product.

[0004]

As one aspect of use of a chocolate, for the purpose of diversification of flavor, prevention of moisture transfer, maintenance of texture, and the like, coating (covering) frozen confectionery, such as ice cream, with the chocolate, kneading the chocolate in the frozen confectionery, or dropping the chocolate on the frozen confectionery can be exemplified.

[0005]

As an oil and/or fat used for the chocolate, a chocolate for coating using an interesterified oil and/or fat not containing a lauric oil and/or fat is disclosed (Patent Documents 1 to 3).

[0006]

As another related art, Patent Document 4 discloses a chocolate for frozen confectionery in which blooming hardly occurs in a freezing temperature range, wherein a linear saturated fatty acid having from 8 to 10 carbons is contained as an essential component.

Citation List

Patent Documents

[0007]

Patent Document 1: JP 2001-321076 A

Patent Document 2: JP 2010-268749 A

Patent Document 3: JP 2012-244920 A

Patent Document 4: JP 2018-148848 A

Patent Document 5: WO 2020/235170 A1

Summary of Invention

Technical Problem

[0008]

The applicant has proposed a chocolate for frozen confectionery which has a low content of saturated fatty acid, is quickly solidified while being soft in initial chew under freezing, has a moderate residual property, and has a flavor of the chocolate (Patent Document 5).

The applicant aimed to solve another problem in the chocolate.

[0009]

An object of the present invention is to provide a chocolate which solidifies quickly, melts well in the mouth, and develops an excellent flavor.

Solution to Problem

[0010]

As a result of intensive studies to solve the above-described problem, the present inventors have found that a chocolate containing a randomly interesterified oil having a specific constituent fatty acid composition may solve the problem, and have completed the present invention.

[0011]

That is, the present invention includes the following contents.

(1) A chocolate containing an oil and/or fat having an SFC at 25°C of 10% or less, the chocolate containing a randomly interesterified oil satisfying the following (A) and (B):

(A) a content of a saturated fatty acid having from 12 to 18 carbons is 20 mass% or more in a constituent fatty acid composition; and

(B) a content mass ratio of a total amount of a saturated fatty acid having from 12 to 14 carbons to a total amount of the saturated fatty acid having from 12 to 18 carbons is 0.2 or more and less than 1 in the constituent fatty acid composition.

(2) The chocolate according to (1), wherein, in the randomly interesterified oil, (C) a content of an unsaturated fatty acid is 50 mass% or more and 80 mass% or less in the constituent fatty acid composition.

(3) The chocolate according to (1) or (2), wherein, in the randomly interesterified oil, (D) a content of the saturated fatty acid having from 12 to 14 carbons is 5 mass% or more and 30 mass% or less in the constituent fatty acid composition.

(4) The chocolate according to (1) or (2), wherein the oil and/or fat content in the chocolate is 30 mass% or more and 70 mass% or less, and the oil and/or fat content in the chocolate contains the randomly interesterified oil in an amount of 5 mass% or more and 97 mass% or less.

(5) The chocolate according to (3), wherein the oil and/or fat content in the chocolate is 30 mass% or more and 70 mass% or less, and the oil and/or fat content in the chocolate contains the randomly interesterified oil in an amount of 5 mass% or more and 97 mass% or less.

(6) A frozen confectionery containing the chocolate according to (4).

(7) A frozen confectionery containing the chocolate according to (5).

Advantageous Effects of Invention

[0012]

According to the present invention, it is possible to provide a chocolate which solidifies quickly, melts well in the mouth, and develops an excellent flavor.

Description of Embodiments

[0013]

The present invention will be described in detail below.

[0014]

The chocolate of the present invention is a chocolate in which an oil and/or fat contained in the chocolate has an SFC at 25°C of 10% or less. In the present specification, the oil and/or fat contained in the chocolate is the total amount of an oil and/or fat derived from oils and/or fats, and all oils and/or fats contained in raw materials of the chocolate, such as cocoa mass, cocoa, and milk powder.

[0015]

Examples of the oil and/or fat that may be used in the chocolate of the present invention include vegetable oils and/or fats, such as soybean oil, high-erucic rapeseed oil, rapeseed oil, corn oil, cottonseed oil, peanut oil, sunflower oil, high-oleic sunflower oil, rice oil, safflower oil, high-oleic safflower oil, olive oil, sesame oil, palm oil, coconut oil, palm kernel oil, shea butter, sal fat, and cocoa fat; animal oils and/or fats, such as milk fat, beef tallow, and lard; a medium-chain fatty acid-conjugated oil and/or fat (MCT); and their hydrogenated oils, fractionated oils, hydrogenated fractionated oils, fractionated hydrogenated oils, and processed oils and/or fats produced by interesterification or the like; and mixed oils of these.

A preferred aspect is directed to low-trans fatty acid in the present invention and thus may produce a chocolate without using a partially hydrogenated oil containing a relatively large amount of trans fatty acid.

In the case of using high-erucic rapeseed oil, the content of erucic acid contained in the high-erucic rapeseed oil is preferably 30 mass% or more in the constituent fatty acid composition.

The content of oleic acid contained in high-oleic sunflower oil or high-oleic safflower oil is preferably 60 mass% or more in the constituent fatty acid composition.

[0016]

The term “chocolate” of the present invention is not limited to “pure chocolate”, “chocolate”, “quasi-chocolate”, and “chocolate-using foods” as defined by the Japan National Chocolate Industry Fair Trade Council, and refers to food products, including also oil and/or fat processed foods, that contain an oil and/or fat as an essential component and use cocoa mass, cocoa, whole milk powder, dried fruit juice powder, dried vegetable powder, plant milk powder, cocoa butter, cocoa butter alternatives, hard butter and the like. Accordingly, the term may also generally refer to foods in which edible substances are dispersed in an oil and/or fat-based matrix, including, for example, matcha-flavored foods and strawberry-flavored foods obtained by mixing powders derived from vegetables or fruits.

[0017]

A preferred aspect of the chocolate of the present invention is a chocolate that may be used for frozen confectionery.

[0018]

In the present specification, the frozen confectionery is not particularly limited as long as it is a confectionery that is in a freezing temperature range when eaten, and representative examples thereof include ice cream, ice milk, and lacto ice as defined in “Ministerial Ordinance Concerning Compositional Standards, etc. for Milk and Milk Products”, so-called “Ministerial Ordinance Concerning Milk etc.”, and frozen confectioneries defined in “Standards and Criteria for Food and Food Additives, etc.” announced by the Ministry of Health and Welfare.

[0019]

The chocolate of the present invention is a chocolate containing a randomly interesterified oil satisfying the following (A) and (B):

(A) a content of a saturated fatty acid having from 12 to 18 carbons is 20 mass% or more in a constituent fatty acid composition; and

(B) a content mass ratio of a total amount of a saturated fatty acid having from 12 to 14 carbons to a total amount of the saturated fatty acid having from 12 to 18 carbons is 0.2 or more and less than 1 in the constituent fatty acid composition.

[0020]

In (A) described above, the content of the saturated fatty acid having from 12 to 18 carbons is 20 mass% or more, preferably 20 mass% or more and 50 mass% or less, more preferably 20 mass% or more and 45 mass% or less, and even more preferably 20 mass% or more and 40 mass% or less in the constituent fatty acid composition.

[0021]

In (B) described above, a content mass ratio of a total amount of a saturated fatty acid having from 12 to 14 carbons to a total amount of the saturated fatty acid having from 12 to 18 carbons is 0.2 or more and less than 1, preferably 0.2 or more and 0.8 or less, and more preferably 0.2 or more and 0.7 or less in the constituent fatty acid composition.

[0022]

In a preferred aspect, in the randomly interesterified oil, (C) a content of an unsaturated fatty acid is 50 mass% or more and 80 mass% or less, more preferably 52 mass% or more and 80 mass% or less, and still more preferably 55 mass% or more and 80 mass% or less in the constituent fatty acid composition.

[0023]

In a preferred aspect, in the randomly interesterified oil, (D) a content of the saturated fatty acid having from 12 to 14 carbons is 5 mass% or more and 30 mass% or less, more preferably 5 mass% or more and 27 mass% or less, still more preferably 5 mass% or more and 25 mass% or less, and even more preferably 6 mass% or more and 23 mass% or less in the constituent fatty acid composition.

[0024]

For the randomly interesterified oil, the oil and/or fat to be used as a raw material oil and/or fat is not particularly limited as long as it satisfies the constitution described above, and an oil and/or fat raw material r and an oil and/or fat raw material s described below are preferably used as essential components.

Oil and/or fat raw material r: a vegetable oil and/or fat having an iodine value of from 56 to 150

Oil and/or fat raw material s: a lauric oil and/or fat

[0025]

In the present specification, examples of the vegetable oil and/or fat having an iodine value of from 56 to 150 to be used as the oil and/or fat raw material r include soybean oil, rapeseed oil, corn oil, cottonseed oil, peanut oil, sunflower oil, rice oil, safflower oil, olive oil, palm olein, and shea olein. Preferred are soybean oil, rapeseed oil, corn oil, cottonseed oil, sunflower oil, rice oil, and safflower oil each having an iodine value of from 70 to 145.

[0026]

In the present specification, the lauric oil and/or fat used as the oil and/or fat raw material s is an oil and/or fat containing a large amount of lauric acid, which is a saturated fatty acid having 12 carbons, and an oil and/or fat in which the content of lauric acid in all constituent fatty acids is 30 mass% or more, preferably 40 mass% or more is used. Specific examples thereof include coconut oil, palm kernel oil, and their hydrogenated oil, fractionated oil, hydrogenated fractionated oil, fractionated hydrogenated oil, as well as mixed oils of these.

[0027]

The method of the random interesterification may be a method using a chemical catalyst or a method using an enzyme catalyst. For the chemical catalyst, for example, an alkali metal catalyst, such as sodium methylate, may be used. Examples of the enzyme catalyst include lipases of the genus *Alcaligenes*, the genus *Penicillium*, and the genus *Thermomyces*. These lipases may be used after being immobilized on an ion-exchange resin, diatomaceous earth, or the like by a known method, or may be used in the form of a powder.

[0028]

As described above, in the present specification, the oil and/or fat includes a fat (cocoa butter) derived from a cocoa raw material, such as cocoa mass or cocoa powder, and also a fat derived from a raw material to be blended in the chocolate. The oil and/or fat content in the chocolate is preferably from 30 mass% to 70 mass%, and more preferably from 45 mass% to 65 mass%. When the oil and/or fat content is suitable, it is easy to combine the chocolate with frozen confectionery. In particular, a coating operation is easily performed, and the frozen confectionery can be uniformly coated. When the oil and/or fat content is less than the lower limit value, the viscosity of the chocolate at the time of coating is high, and uniform coating may fail to be achieved. On the other hand, when the oil and/or fat content is more than the upper limit value, a flavor of the chocolate may be weakened, and an oily feeling may be strengthened.

In another preferred aspect, the randomly interesterified oil is contained in an amount of from 5 mass% to 97 mass% in the oil and/or fat in the chocolate. The content is more preferably from 6 mass% to 88 mass%, and still more preferably from 9 mass% to 70 mass%. Using less than 5 mass% of the randomly interesterified oil may fail to achieve the effects of the present invention or the texture required for the chocolate.

[0029]

When the requirements are satisfied, a saccharide, a dairy product such as whole fat dry milk, non-fat dry milk, cream powder, whey powder, and butter milk powder, a cacao component such as cocoa mass, cocoa powder, and adjusted cocoa powder, or a raw material such as cheese powder, coffee powder, and fruit juice powder may be appropriately used in the chocolate of the present invention. In addition, vanillin, an aroma agent, an acidulant, or a dye may be appropriately used for adjusting the flavor and color tone.

Moreover, in the chocolate of the present invention, it is possible to use an emulsifier which is usually used in the production of the chocolate. Examples include lecithin, a polyglycerol fatty acid ester, a sucrose fatty acid ester, an organic acid monoglycerol fatty acid ester, polysorbate, and a polyglycerol condensed ricinoleic acid ester. These may be used in combination of two or more types.

[0030]

A method for producing the chocolate of the present invention may be carried out in the same manner as in producing a general chocolate. Specifically, the chocolate may be produced by appropriately selecting and mixing, with the oil and/or fat, (a part of) cocoa mass, various powdered foods such as cocoa powder, saccharides, and powdered milk, and raw materials such as an emulsifier, an aroma agent, and a dye; subjecting the mixture to roll-refining as a refining step; adding the remaining raw materials as appropriate; and then performing conching or mixing treatment as a mixing step. Alternatively, for example, a production method in which a mixing step and a refining step are performed in parallel using a ball mill, a bead mill, or the like may also be used.

[0031]

As a preferred aspect, an aspect in which the chocolate of the present invention is used for frozen confectionery can be exemplified. The shape and method of use are not particularly limited, and examples thereof include “coating applications” in which frozen confectionery is immersed in the melted chocolate of the present invention to coat a surface of the frozen confectionery with the chocolate, and “kneading or dropping applications” in which the melted chocolate is added dropwise and mixed into frozen confectionery having fluidity such as ice cream to be solidified and present in a granular or broken form in the frozen confectionery. The combination form of frozen confectionery and the chocolate is not particularly limited, and examples thereof include not only a case where the surface of the frozen confectionery is uniformly covered, but also an aspect in which the frozen confectionery and the chocolate are locally combined, such as an aspect in which when only a part of the surface of the frozen confectionery is covered, or when the chocolate is kneaded into the frozen confectionery and used, by increasing the dropping amount, granular or fragmentary chocolates are hard to be separated from each other to form a marble shape or a thin plate shape in the frozen confectionery.

Examples

[0032]

Hereinafter, the present invention will be described in more detail with reference to Examples of the present invention.

[0033]

○ Analysis method

[Method for analyzing iodine value]

The iodine value of an oil and/or fat was analyzed in accordance with Standard Methods for the Analysis of Fats, Oils and Related Materials 2.3.4.1-2013.

[Method for analyzing fatty acid composition]

The fatty acid composition was analyzed in accordance with the method specified in 2.4.1.2 Methyl Esterification Method (Boron Trifluoride-Methanol Method) in the JOCS Standard Methods for the Analysis of Fats, Oils and Related Materials (1996 Edition), published by Japan Oil Chemists' Society.

[Method for analyzing slip melting point]

The slip melting point was analyzed in accordance with the method specified in 2.2.4.2 (Slip Melting Point) in the JOCS Standard Methods for the Analysis of Fats, Oils and Related Materials (1996 Edition), published by Japan Oil Chemists' Society.

[SFC Parallel measurements at each temperature]

The SFC is analyzed in accordance with IUPAC. 2 150 SOLID CONTENT DETERMINATION IN FATS BY NMR. The analyzer used is “minispec mq20” available from Bruker Corporation.

The oil and/or fat is held at 80°C for 30 minutes, then held at 60°C for 30 minutes to completely melt the oil and/or fat, and held at 0°C for 1 hour to solidify the oil and/or fat. In addition, the SFC (solid fat content) was analyzed after being held at a predetermined temperature for 30 minutes.

[0034]

○ Oil and/or fat used for examination

The raw material oil and/or fat was blended according to the description in Table 1 (unit was parts by mass). A random interesterification reaction was performed on 1.0 kg of the blended oil using sodium methylate as a catalyst until randomization was completed. Thereafter, the catalyst was deactivated by washing with an acidic solution and washing with warm water, and then decolorization and deodorization were performed as usual to produce randomly interesterified oils 1 to 4. The content of oleic acid in the constituent fatty acid composition of a high-oleic sunflower oil used was 86.0 mass%.

In the table, the iodine value was expressed as IV.

[0035]

The results of analysis of the randomly interesterified oils 1 to 4 according to [Method for analyzing fatty acid composition] described above are shown in Table 2 (unit is mass%).

In the table, the number following C indicates the number of carbons, and the number on the right side of “:” indicates the number of double bonds. For saturated fatty acids having no double bonds, the notation after ":" was omitted.

In the constituent fatty acid composition, the content (mass%) of a saturated fatty acid having 12 to 18 carbons was described as M, the content (mass%) of a saturated fatty acid having 12 to 14 carbons was described as N, the total amount (mass%) of unsaturated fatty acid was described as O, and in the constituent fatty acid composition, the content mass ratio of the total amount of the saturated fatty acid having 12 to 14 carbons to the total amount of the saturated fatty acid having 12 to 18 carbons was described as N/M.

[0036]

[Table 1]

	Randomly interesterified oil raw material formulation			
	1	2	3	4
Rapeseed oil, IV = 117	57.5	81.0	40.0	45.0
Palm kernel oil, IV = 18	35.0	9.0	40.0	
Palm fully hydrogenated oil, IV < 1	7.5	10.0	20.0	
Palm super olein, IV = 67				30.0

High-oleic sunflower oil, IV = 84				5.5
High-oleic sunflower fully hydrogenated oil, IV < 1				19.5

[0037]

[Table 2]

	Randomly interesterified oil			
	1	2	3	4
C8	1.3	0.3	1.5	0.0
C10	1.2	0.3	1.3	0.0
C12	14.8	3.5	15.6	0.0
C14	4.7	1.3	5.5	0.3
C16	9.0	8.5	14.3	11.7
C18	6.0	7.1	11.8	19.8
C18:1	45.4	54.5	34.9	47.6
C18:2	12.4	15.2	8.6	12.1
C18:3	4.0	7.1	3.4	4.0
C20	0.0	0.0	0.0	0.2
C22	0.2	0.2	0.1	0.3
Total	100.0	100.0	100.0	100.0
N	19.5	5.1	22.4	0.3
M	34.4	20.9	49.1	32.8
N/M	0.6	0.2	0.5	0.0
O	62.9	78.2	48.0	66.5

[0038]

○ Blending of examination oil and/or fat for chocolate

Using the produced randomly interesterified oils 1 to 4, oils and/or fats were mixed according to Table 3 (unit was parts by mass) to produce an examination oil and/or fat portion to be used in Table 4 (blending of chocolate).

[0039]

○ Evaluation by chocolate test

A chocolate was produced using the produced examination oil and/or fat. Chocolates of Examples 1 to 3 and Comparative Examples 1 to 3 were produced according to the following [Method for preparing chocolate] with the same formulation according to the formulation in Table 4 (unit was parts by mass) except for the examination oil and/or fat portion.

The chocolate was coated according to the following [Method for coating frozen confectionery with chocolate], and then the evaluation results were described in Table 5

according to the following [Method for evaluating chocolate] and [Evaluation criteria for chocolate].

Analytical values (M, N, N/M, O) of the randomly interesterified oil used were also described.

[0040]

[Table 3]

	Examination oil and/or fat 1	Examination oil and/or fat 2	Examination oil and/or fat 3	Examination oil and/or fat 4	Examination oil and/or fat 5	Examination oil and/or fat 6
Soybean oil	81.5	53.7	53.7	53.7	53.7	53.7
Coconut oil	18.5	18.5	18.5	18.5	18.5	18.5
Palm super olein, IV = 67		27.8				
Randomly interesterified oil 1			27.8			
Randomly interesterified oil 2				27.8		
Randomly interesterified oil 3					27.8	
Randomly interesterified oil 4						27.8

[0041]

[Table 4]

	Formulation
Examination oil and/or fat	54.0
Sugar	31.8
Cocoa powder	13.7
Lecithin	0.5

[0042]

○ SFC at 25°C of oil and/or fat content contained in chocolate

A mixed oil was produced to contain 97.3 parts by mass of examination oil and/or fat and 2.7 parts by mass of cocoa butter, the mixed oil corresponding to the oil and/or fat content

composed of the examination oil and/or fat portion described in Table 4 and a cocoa butter portion derived from cocoa powder. The content of oil and/or fat (cocoa butter) in the cocoa powder used was 11 mass%.

The SFC at 25°C of each of the produced mixed oils was analyzed according to [SFC Parallel measurements at each temperature] described above. The results are shown in Table 5 (unit is mass%).

[0043]

[Method for producing chocolate]

Suitable amounts of an examination oil and/or fat and lecithin were added to cocoa powder and sugar. They were mixed with a mixer while being heated, to produce a dough. This dough was refined to a particle size of about 20 μm with a roll refiner (three-roll mill SDY300 available from Buhler Inc.). All remaining amounts of the oil and/or fat and lecithin were added to this, and the mixture was uniformly kneaded with a conching machine (conche), to thereby produce a chocolate.

[0044]

[Method for coating frozen confectionery with chocolate]

The produced chocolate was heated to 50°C to completely melt oil and/or fat crystals, then cooled to 40°C, and held at a constant temperature. On the other hand, a commercially available ice cream bar (lacto ice available from LOTTE CO., LTD.) was taken out from a freezer set at -20°C, quickly immersed in the dissolved chocolate, and pulled up after 1 second. In an environment of room temperature of 20°C, the time until the surface of the coated chocolate was completely solidified was measured, and then the ice cream bar was stabilized in a freezer at -20°C overnight.

[0045]

[Method for evaluating chocolate]

Sensory evaluation was performed on the ice cream bar coated with the chocolate based on the following evaluation criteria by five trained panelists who were engaged in the development of materials for frozen confectionery and routinely prepared prototype frozen confectionery. At this time, a case where each score determined by consensus among the panelists was 3 or more points was regarded as acceptable.

[0046]

[Evaluation criteria for chocolate]

○ Solidification: The time until the chocolate did not adhere to a finger even if the surface of the coated chocolate was stroked with the finger was measured, and the evaluation was performed based on the following criteria.

4: less than 70 seconds (very fast)

3: more than 70 seconds and less than 90 seconds (fast)

2: more than 90 seconds and less than 100 seconds (normal)

1: more than 100 seconds (slow)

○ Meltability in mouth

4: Meltability in the mouth is excellent.

3: Meltability in the mouth is good.

2: Meltability in the mouth is slightly poor.

1: Meltability in the mouth is poor.

○ Flavor development

4: Flavor of chocolate is felt strongly.

3: Flavor of chocolate is felt.

2: Flavor of chocolate is felt weakly.

1: Flavor of chocolate is hardly felt.

The chocolate having 3 or more points in all of solidification, meltability in the mouth, and flavor development was regarded as acceptable.

[0047]

[Table 5]

	Comparative Examples			Examples		
	1	2	3	1	2	3
Examination oil and/or fat used	1	2	6	3	4	5
SFC (%) at 25°C of oil and/or fat content contained in chocolate	0.0	0.1	0.9	0.2	0.1	0.4
Drying time (sec)	104	129	34	47	64	17
Drying evaluation	1	1	4	4	4	4
Meltability in mouth	4	4	2	4	4	3
Flavor development	2	2	2	4	4	3
Randomly interesterified oil used	None	None	4	1	2	3
N	-	-	0.3	19.5	5.1	22.4
M	-	-	32.8	34.4	20.9	49.1
N/M	-	-	0.0	0.6	0.2	0.5
O	-	-	66.5	62.9	78.2	48.0

[0048]

○ Discussion on Table 5

In the ice cream bars of the Examples, all the evaluation items were evaluated as acceptable, and the target quality was achieved.

[0049]

○ Evaluation of fatty acid composition analytical value

The fatty acid composition of the randomly interesterified oil was evaluated using the following numerical range as an index.

M (the content of the saturated fatty acid having from 12 to 18 carbons in the constituent fatty acid composition) is 20 mass% or more

N (the content of the saturated fatty acid having from 12 to 14 carbons in the constituent fatty acid composition) is 5 mass% or more and 30 mass% or less

N/M (the content mass ratio of the total amount of the saturated fatty acid having from 12 to 14 carbons to the total amount of the saturated fatty acid having from 12 to 18 carbons in the constituent fatty acid composition) is 0.2 or more and less than 1

O (the content of the unsaturated fatty acid in the constituent fatty acid composition) is 50 mass% or more and 80 mass% or less

[0050]

○ Evaluation result of fatty acid composition analytical value

· In the randomly interesterified oils 1 to 3 used in Examples in which the target quality is achieved, each of the M and the N/M satisfies the numerical range used as an index.

· In the randomly interesterified oils 1 to 3, in addition to the M and the N/M, the O also satisfies the numerical range as an index.

· In the randomly interesterified oils 1 to 3, in addition to the M and the N/M, the N also satisfies the numerical range as an index.

· The randomly interesterified oil 4 used in Comparative Example 3 where the target quality was not achieved did not satisfy the N/M.

[0051]

○ Discussion on oil and/or fat raw material used

The randomly interesterified oils 1 to 3 used in Examples in which the target quality is achieved contain the following oil and/or fat raw material r and oil and/or fat raw material s in the raw material oil and/or fat in addition to the above configuration.

Oil and/or fat raw material r: a vegetable oil and/or fat having an iodine value of from 56 to 150

Oil and/or fat raw material s: a lauric oil and/or fat

[0052]

○ SFC at 25°C of oil and/or fat content contained in chocolate

The SFC at 25°C of the oil and/or fat content contained in each chocolate was 10% or less.

As a preferred aspect, the chocolate of the present invention, which satisfied the above-described numerical range, was a chocolate suitable for use in frozen confectionery.

Industrial Applicability

[0053]

According to the present invention, it is possible to provide a chocolate which solidifies quickly, melts well in the mouth, and develops an excellent flavor.

Claims

[Claim 1]

A chocolate comprising an oil and/or fat having an SFC at 25°C of 10% or less, the chocolate comprising a randomly interesterified oil satisfying the following (A) and (B):

(A) a content of a saturated fatty acid having from 12 to 18 carbons is 20 mass% or more in a constituent fatty acid composition; and

(B) a content mass ratio of a total amount of a saturated fatty acid having from 12 to 14 carbons to a total amount of the saturated fatty acid having from 12 to 18 carbons is 0.2 or more and less than 1 in the constituent fatty acid composition.

[Claim 2]

The chocolate according to claim 1, wherein, in the randomly interesterified oil, (C) a content of an unsaturated fatty acid is 50 mass% or more and 80 mass% or less in the constituent fatty acid composition.

[Claim 3]

The chocolate according to claim 1 or 2, wherein, in the randomly interesterified oil, (D) a content of the saturated fatty acid having from 12 to 14 carbons is 5 mass% or more and 30 mass% or less in the constituent fatty acid composition.

[Claim 4]

The chocolate according to claim 1 or 2, wherein the oil and/or fat content in the chocolate is 30 mass% or more and 70 mass% or less, and the oil and/or fat content in the chocolate contains the randomly interesterified oil in an amount of 5 mass% or more and 97 mass% or less.

[Claim 5]

The chocolate according to claim 3, wherein the oil and/or fat content in the chocolate is 30 mass% or more and 70 mass% or less, and the oil and/or fat content in the chocolate contains the randomly interesterified oil in an amount of 5 mass% or more and 97 mass% or less.

[Claim 6]

A frozen confectionery comprising the chocolate according to claim 4.

[Claim 7]

A frozen confectionery comprising the chocolate according to claim 5.