

List of food additives and processing aids for Wine (Fruit wine and Sweet fruit wine made from grapes as main ingredients) in Japan

Name of substances		Time of use *1				Remarks
English	Japanese	Before completion of liquor production	Purpose of use	After completion of liquor production	Purpose of use	
Activated Acid Clay	活性白土			○	Clarification, Fining	
Active Carbon	活性炭			○	Clarification, Fining, Adjustment	
Agar	寒天			○	Clarification, Fining	
Ammonia	アンモニア	○	Sound wine-making *2	○	Acidity regulator	
Ammonium Dihydrogen Phosphate Diammonium Hydrogen Phosphate	りん酸アンモニウム (リン酸二水素アンモニウム) (リン酸水素二アンモニウム)	○	Sound wine-making *2			
Ammonium Hydrogen Sulfite Water (Ammonium Bisulphite)	亜硫酸水素アンモニウム水 (亜硫酸水素アンモニウム)	○	Sound wine-making *2			
Ammonium Sulfate	硫酸アンモニウム	○	Sound wine-making *2			
α-Amylase	α-アミラーゼ	○	Accelerating decomposition of starch and fibrous substances contained in apple juice			
Argon	アルゴン	○	Sound wine-making *2	○	Antioxidant	
L-Ascorbic Acid	L-アスコルビン酸			○	Antioxidant	
Bentonite	ベントナイト			○	Clarification, Fining	
Calcium Alginate	アルギン酸カルシウム	○	Sound wine-making *2			
Calcium Carbonate	炭酸カルシウム	○	Sound wine-making *2	○	Acidity regulator	
Calcium Chloride	塩化カルシウム	○	Sound wine-making *2			
Calcium Dihydrogen Phosphate	酸性りん酸カルシウム (リン酸二水素カルシウム)	○	Sound wine-making *2			
Calcium Pantothenate	パントテン酸カルシウム	○	Sound wine-making *2			
Calcium Sulfate	硫酸カルシウム	○	Sound wine-making *2			
Caramel	カラメル	○	Coloring			*3
Carbon Dioxide (Carbonic Acid, Gas)	炭酸ガス(二酸化炭素)	○	Sound wine-making *2			
Carrageenan	カラギナン			○	Clarification, Fining	
Casein	カゼイン			○	Clarification, Fining	
Cellulase	セルラーゼ	○	Accelerating decomposition of starch and fibrous substances contained in apple juice			
Chitin-Glucan (Chitin-Glucan derived from Aspergillus)	キチングルカン (コウジカビ属由来のキチングルカン)	○	Sound wine-making *2	○	Clarification, Fining	
Chitosan	キトサン			○	Clarification, Fining	
Citric Acid	クエン酸			○	Stabilisation	
Collagen	コラーゲン			○	Clarification, Fining	*4
Copolymer of Vinylimidazole/Vinylpyrrolidone (PVI/PVP)	ビニルイミダゾール・ビニルピロリドン共重 合体(PVI/PVP)	○	Sound wine-making *2	○	Clarification, Fining	
Diatomaceous Earth	ケイソウ土			○	Clarification, Fining	
Dimethyl Dicarbonate (Dimethyldicarbonate)	二炭酸ジメチル	○	Sound wine-making *2	○	Preventing refermentation	
Dipotassium DL-Tartrate (Neutral Salt of Potassium DL Tartaric Acid)	DL-酒石酸カリウム (中性酒石酸(DL)カリウム)	○	Sound wine-making *2	○	Stabilisation	
Dipotassium L-Tartrate (Neutral Salt of DL Tartaric Acid)	L-酒石酸カリウム (中性酒石酸カリウム)	○	Sound wine-making *2	○	Acidity regulator	

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Egg White	卵白			○	Clarification, Fining	
Erythorbic Acid	エリソルビン酸			○	Antioxidant	
Folic Acid	葉酸	○	Sound wine-making *2			
Gelatin	ゼラチン			○	Clarification, Fining	
β -Glucanase	β -グルカナーゼ			○	Clarification, Fining	*5
Gluten	グルテン			○	Clarification, Fining	
Gum Arabic	アラビアガム			○	Stabilisation	
Hemicellulase	ヘミセルラーゼ			○	Clarification, Fining	*5
Inactivated Yeasts	不活性酵母	○	Sound wine-making *2	○	Stabilisation	
Ion Exchange Resin	イオン交換樹脂			○	Adjustment	
Kaki (Persimmon) Tannin	柿タンニン			○	Clarification, Fining	
Kaolin	カオリン	○	Sound wine-making *2	○	Clarification, Fining	
Lactic Acid	乳酸	○	Sound wine-making *2			*6
Lysozyme	リゾチーム	○	Sound wine-making *2	○	Preventing refermentation	
Magnesium Chloride	塩化マグネシウム	○	Sound wine-making *2			
Magnesium Sulfate	硫酸マグネシウム	○	Sound wine-making *2			
DL-Malic Acid	りんご酸	○	Sound wine-making *2			
Metatartaric Acid	メタ酒石酸	○	Sound wine-making *2	○	Stabilisation	
Microcrystalline Cellulose	微結晶セルロース	○	Sound wine-making *2	○	Stabilisation	
Microfibrillated Cellulose	微小繊維状セルロース			○	Clarification, Fining	
Nicotinic Acid	ナイアシン	○	Sound wine-making *2			
Nitrogen	窒素			○	Antioxidant	
Oak Chips	チップ状又は小片状のオーク(ブナ科コナラ属の植物)(オークチップ)	○	Adding flavor, Antioxidant			
Oxygen	酸素	○	Sound wine-making *2			
Papain	パパイン			○	Clarification, Fining	*5
Pea Protein	エンドウたんぱく			○	Clarification, Fining	
Pectinase	ペクチナーゼ(ペクチン分解酵素剤)	○	Accelerating decomposition of pectic substances contained in fruits	○	Clarification, Fining	*5
Perlite	パーライト	○	Sound wine-making *2	○	Clarification, Fining	
Phosphoric Acid	りん酸	○	Sound wine-making *2			
Phytic Acid	フィチン酸			○	Clarification, Fining	
Polyvinylpyrrolidone	ポリビニルピロリドン			○	Clarification, Fining	
Potassium Alginate	アルギン酸カリウム	○	Sound wine-making *2			
Potassium Carbonate	炭酸カリウム			○	Acidity regulator	
Potassium Caseinate	カゼインカリウム	○	Sound wine-making *2	○	Clarification, Fining	
Potassium Dihydrogen Phosphate Dipotassium Hydrogen Phosphate	酸性りん酸カリウム (リン酸二水素カリウム) (リン酸水素二カリウム)	○	Sound wine-making *2			
Potassium DL-Bitartrate	DL-酒石酸水素カリウム			○	Stabilisation	
Potassium L-Bitartrate	L-酒石酸水素カリウム			○	Stabilisation	

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Potassium Nitrate	硝酸カリウム	○	Sound wine-making *2			
Potassium pyrosulfite (Potassium bisulphite)	メタ重亜硫酸カリウム (ピロ亜硫酸カリウム)	○	Sound wine-making *2	○	Antioxidant	
Potassium Sorbate	ソルビン酸カリウム			○	Preventing refermentation	
Potatoes Protein	ばれいしょたんぱく質	○	Sound wine-making *2	○	Clarification, Fining	
Protease	プロテアーゼ			○	Clarification, Fining	*5,*7
Salt	食塩	○	Sound wine-making *2			
Silicon Dioxide	二酸化ケイ素			○	Clarification, Fining	
Sodium Alginate	アルギン酸ナトリウム			○	Clarification, Fining	
Sodium L-Ascorbate	L-アスコルビン酸ナトリウム			○	Antioxidant	
Sodium Bicarbonate	炭酸水素ナトリウム			○	Acidity regulator	
Sodium Carbonate	炭酸ナトリウム			○	Acidity regulator	
Sodium Carboxymethylcellulose	カルボキシメチルセルロースナトリウム			○	Stabilisation	
Sodium Caseinate	カゼインナトリウム			○	Clarification, Fining	
Sodium Erythorbate	エリソルビン酸ナトリウム			○	Antioxidant	
Sorbic Acid	ソルビン酸			○	Preventing refermentation	
Sulfur Dioxide (Sulfurous Acid, Anhydride)	二酸化硫黄 (無水亜硫酸)	○	Sound wine-making *2	○	Antioxidant	
Tannin	タンニン			○	Clarification, Fining	
DL-Tartaric Acid L-Tartaric Acid (L(+)-tartaric acid)	酒石酸 (L(+)-酒石酸)	○	Sound wine-making *2	○	Acidity regulator	
Thiamine Hydrochloride (Vitamin B1 Hydrochloride)	チアミン塩酸塩	○	Sound wine-making *2			
Urease	ウレアーゼ			○	Stabilisation	*5
Wheat Flour	小麦粉			○	Clarification, Fining	
Yeast Extract / Yeast Autolysates	酵母エキス (酵母自己消化物を含む)	○	Sound wine-making *2	△	Stabilisation	*8
Yeast Cell Walls	酵母細胞壁	○	Sound wine-making *2	○	Stabilisation	
Yeast Protein Extracts	酵母たんぱく質抽出物	○	Sound wine-making *2	○	Clarification, Fining	
Zinc Sulfate	硫酸亜鉛	○	Sound wine-making *2			

*1 "Completion of liquor production" means at the end of main fermentation (including additional fermentation caused by adding saccharides), in principle.

*2 "Sound wine-making" shall indicate helping or promoting fermentation etc.

*3 Caramel can only be used in sweet fruit wine.

*4 Collagen may contain less than 30% of DL-malic acid or a mixture of DL-malic acid and sodium pyrosulfite as a secondary agent.

*5 Papain, protease, urease, pectinase, hemicellulase or β -glucanase may contain lactose or dextrin as a secondary agent.

*6 Lactic Acid may include Lactic acid bacteria.

*7 Protease may contain less than 1% of guar gum as a secondary agent.

*8 Yeast Autolysates can be used for all processes of wine-making, but Yeast Extract except for Yeast Autolysates can only be used before completion of liquor production.

*9 Standards for use and specification of substances shall follow "the Food Sanitation Act".

*10 Although every effort is made to ensure the accuracy of this information, NTA(National Tax Agency) and NRIB(National Research Institute of Brewing) shall accept no responsibility for use of substances.