

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	
Lactic Acid	乳酸	○	Sound wine-making *2			*6
Phosphoric Acid	りん酸	○	Sound wine-making *2			
DL-Malic Acid	りんご酸	○	Sound wine-making *2			
Sulfur Dioxide (Sulfurous Acid Anhydride)	二酸化硫黄(無水亜硫酸)	○	Sound wine-making *2	○	Antioxidant	
DL-Tartaric Acid L-Tartaric Acid(L+) Tartaric Acid)	酒石酸(L+) 酒石酸)	○	Sound wine-making *2	○	Acidity regulator	
Salt	食塩	○	Sound wine-making *2			
Potassium Dihydrogen Phosphate	リン酸二水素カリウム	○	Sound wine-making *2			
Dipotassium Hydrogen Phosphate	リン酸水素二カリウム	○	Sound wine-making *2			
Calcium Dihydrogen Phosphate	リン酸二水素カルシウム	○	Sound wine-making *2			
Ammonium Dihydrogen Phosphate	リン酸二水素アンモニウム	○	Sound wine-making *2			
Diammonium Hydrogen Phosphate	リン酸水素二アンモニウム	○	Sound wine-making *2			
Magnesium Sulfate	硫酸マグネシウム	○	Sound wine-making *2			
Calcium Sulfate	硫酸カルシウム	○	Sound wine-making *2			
Potassium Pyrosulfite (Potassium Disulfite)	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 Hydrogen Sulfite Solution (Potassium Bisulfite)	亜硫酸水素カリウム液	○	Sound wine-making *2	○	Antioxidant	
Calcium Chloride	塩化カルシウム	○	Sound wine-making *2			
Magnesium Chloride	塩化マグネシウム	○	Sound wine-making *2			
Potassium Nitrate	硝酸カリウム	○	Sound wine-making *2			
Ammonium Sulfate	硫酸アンモニウム	○	Sound wine-making *2			
Thiamine Hydrochloride (Vitamin B1 Hydrochloride)	チアミン塩酸塩	○	Sound wine-making *2			
Calcium Carbonate	炭酸カルシウム	○	Sound wine-making *2	○	Acidity regulator	
Ammonia	アンモニア	○	Sound wine-making *2	○	Acidity regulator	
Inactivated Yeasts	不活性酵母	○	Sound wine-making *2	○	Stabilisation	
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	*10
Zinc Sulfate	硫酸亜鉛	○	Sound wine-making *2			
Folic Acid	葉酸	○	Sound wine-making *2			
Calcium Pantothenate	パントテン酸カルシウム	○	Sound wine-making *2			
Nicotinic Acid	ナイアシン	○	Sound wine-making *2			
Tannin (extract)	タンニン(抽出物)	○	Sound wine-making *2	○	Clarification, Fining	
Polyvinylpolypyrrolidone	ポリビニルポリピロリドン	○	Sound wine-making *2	○	Clarification, Fining	
Oxygen	酸素	○	Sound wine-making *2			
Carbon Dioxide (Carbonic Acid Gas)	炭酸ガス(二酸化炭素)	○	Sound wine-making *2			
Argon	アルゴン	○	Sound wine-making *2	○	Antioxidant	
Perlite	パーライト	○	Sound wine-making *2	○	Clarification, Fining	
Potato Protein	ばれいしょたんぱく質	○	Sound wine-making *2	○	Clarification, Fining	

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Yeast Protein Extracts	酵母たんぱく質抽出物	○	Sound wine-making *2	○	Clarification, Fining	
Potassium Caseinate	カゼインカリウム	○	Sound wine-making *2	○	Clarification, Fining	
Calcium Alginate	アルギン酸カルシウム	○	Sound wine-making *2			
Potassium Alginate	アルギン酸カリウム	○	Sound wine-making *2			
Kaolin	カオリン	○	Sound wine-making *2	○	Clarification, Fining	
Lysozyme	リゾチーム	○	Sound wine-making *2	○	Preventing refermentation	
Dimethyl Dicarboxylate (Dimethyldicarboxylate)	二炭酸ジメチル	○	Sound wine-making *2	○	Preventing refermentation	
Microcrystalline Cellulose	微結晶セルロース	○	Sound wine-making *2	○	Stabilisation	
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	
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	
Potassium Ferrocyanide	フェロシアン化カリウム	○	Sound wine-making *2	○	Clarification, Fining	
Calcium Phytate	フィチン酸カルシウム	○	Sound wine-making *2	○	Clarification, Fining	
Ammonium Hydrogen Sulfite Water (Ammonium Bisulfite)	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			
Metatartaric Acid	メタ酒石酸	○	Sound wine-making *2	○	Stabilisation	
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	
Calcium L-Tartrate	L-酒石酸カルシウム	○	Sound wine-making *2	○	Stabilisation	
Copper sulfate	硫酸銅	○	Sound wine-making *2	○	Stabilisation	
Dipotassium L-Tartrate (Neutral Potassium Tartrate)	L-酒石酸カリウム (中性酒石酸カリウム)	○	Sound wine-making *2	○	Acidity regulator	
Potassium Hydrogen Carbonate	炭酸水素カリウム	○	Sound wine-making *2	○	Acidity regulator	
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
α-Amylase	α-アミラーゼ	○	Accelerating decomposition of starch and fibrous substances contained in apple juice			
Cellulase	セルラーゼ	○	Accelerating decomposition of starch and fibrous substances contained in apple juice			
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	○	Adding flavor, Antioxidant	
Activated Acid Clay	活性白土			○	Clarification, Fining	
Active Carbon	活性炭			○	Clarification, Fining, Adjustment	
Agar	寒天			○	Clarification, Fining	
L-Ascorbic Acid	L-アスコルビン酸			○	Antioxidant	
Bentonite	ベントナイト			○	Clarification, Fining	
Caramel	カラメル			○	Coloring	*3
Carrageenan	カラギナン			○	Clarification, Fining	
Casein	カゼイン			○	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,*9
Diatomaceous Earth	ケイソウ土			○	Clarification, Fining	
Egg White	卵白			○	Clarification, Fining	
Erythorbic Acid	エリソルビン酸			○	Antioxidant	

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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
Ion Exchange Resin	イオン交換樹脂			○	Adjustment	
Kaki (Persimmon) Tannin	柿タンニン			○	Clarification, Fining	
Microfibrillated Cellulose	微小繊維状セルロース			○	Clarification, Fining	
Nitrogen	窒素			○	Antioxidant	
Papain	パパイン			○	Clarification, Fining	*5
Pea Protein	エンドウたんぱく			○	Clarification, Fining	
Phytic Acid	フィチン酸			○	Clarification, Fining	
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	
Potassium Carbonate	炭酸カリウム			○	Acidity regulator	
Potassium Sorbate	ソルビン酸カリウム			○	Preventing refermentation	
Protease	プロテアーゼ			○	Clarification, Fining	*5,*7
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	
Urease	ウレアーゼ			○	Stabilisation	*5
Wheat Flour	小麦粉			○	Clarification, Fining	

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

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

*3 Wines treated with Caramel shall be classified as "sweet fruit wine".

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

*5 Lactose or dextrin is contained in Papain, Protease, Urease, Pectinase, Hemicellulase or β -glucanase as a secondary agent.

*6 Lactic acid bacteria is permitted as Lactic Acid.

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

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

*9 Isinglass is permitted as Collagen.

*10 Yeast Mannoprotein is permitted as Yeast Cell Walls.

*11 "Yeast for wine production" is not listed here because it is assumed as an ingredient in Japan.

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

*13 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.