

Additives for food production



Kanto Chemical supply small quantity packing for research & development and small quantity of trial manufacture.

ORGANIC ACIDS / SALTS

Product name	Catalog No.	Size	Ingredient • Property	Principal use
Citric Acid	58012-17	500g	Clear and colorless crystal or white crystalline powder. Sour taste.	The main ingredient of the sour taste of the citrus fruits. Sour flavor of soft drink, jam, candy, canned fruits etc.. pH adjuster.
	58801-43	25kg		
Trisodium Citrate	58011-17	500g	Colorless crystal or white crystalline powder. Odorless and salty taste.	As buffering agent, emulsifier, stabilizer. To ease the sour taste of the citric acid in particular.
	58805-43	25kg		
Ferric Citrate	58005-17	500g	Brown powder.	Contain in biscuits, modified milk powder and flour etc. as strengthening agent of iron.
Lactic Acid	58026-17	500g	Colorless-pale yellow clear liquid. Mild sour taste.	Soft and mild sour taste. Sour flavor of lactic fermenting beverage, fruit juices, candy and jelly etc. pH adjuster of pickles, meat etc.
	58812-41	20kg		
L-Tartaric Acid	58033-17	500g	Colorless crystal or crystalline. Strong sour taste.	Sour flavor of soft drink, candy, jam etc. pH adjuster.
Calcium pantothenate	58038-17 (New)	500g	White powder or grain and dissolve in water but hardly dissolve in ethanol.	Add to jellies, gummy etc. to increase the gel strength and improve functionality of a food (Criteria for use) contain less than 1.0% as Ca
Sodium lactate	58506-17 (New)	500g	Clear and colorless syrupy liquid. Odorless or less odor and slightly salty taste. Dissolve in water and ethanol.	For sour taste and adjustment of acidity. Effective in pH adjustment.

PHOSPHATES

Product name	Catalog No.	Size	Ingredient • Property	Principal use
Tricalcium Phosphate	58027-17	500g	White powder. Hardly dissolve in water. (Solubility to the water about 0.002%) (calcium content 39%)	Strengthening agent of Ca etc. swelling agent, emulsifier for processed cheese etc. (Criteria for use) contain less than 1.0% as Ca
Ferric Pyrophosphate Solution	58025-17	500g	White-pale yellow milky liquid. Odorless and slightly metallic taste. About 3% is contained as Ferric Pyrophosphate .	Iron enhancer for modified milk powder, substitution food of breast milk, baby food and other general food.
	58025-36	10kg		
Sodium Metaphosphate	58023-17	500g	White powder. Highly hygroscopic and become viscous liquid slowly by absorbing moisture from the air.	Metal ion sequestration, dispersibility, buffering, good for water retention binding action, quality improver for general foods
Sodium Polyphosphate	58019-17	500g	White powder. Mix items of 1:1 of tripolyphosphate Na and tetrapolyphosphate Na	
Dipotassium Hydrogen Phosphate	58015-17	500g	White powder. Water solution is alkaline. pH: 8.7~9.3 (1% water solution)	
Potassium DiHydrogen Phosphate	58016-17	500g	Colorless crystal or white crystalline powder. Water solution is acidity. pH 4.4~4.9 (1% water solution)	Binder of processed meat, ingredient of salt water, additives for brewing, flavoring agent, leavening agent and emulsifier of processed cheeses.
Disodium hydrogen Phosphate	58017-17	500g	Colorless - white crystal pH 9.0~9.6 (1% water solution)	Adjust pH of foods by buffering action.
Sodium Dihydrogen Phosphate	58018-17	500g	Colorless - white crystal or crystalline powder. pH 4.3~4.9 (1% water solution)	

OTHER INORGANIC SALTS

Product name	Catalog No.	Size	Ingredient • Property	Principal use
Potassium Chloride	58028-17	500g	White crystalline powder	For salt-reduced food as a partly substitute for salt. For breads, salad dressing, sauce, ketchup, sausages, instant noodles, sports drinks
Calcium Carbonate	58036-17	500g	White fine powder	Contain in bread, miso etc. as Ca strengthening agent. Deoxidizer of liquor, water for brewing of hardness agent, base of chewing gum etc. (Criteria for use) Contain 3% in Chewing gum and less than 1.0% in others as Ca.
Calcium Chloride	58001-17	500g	White crystal or crystalline powder	As coagulant of tofu, for natural cheese product etc. (Criteria for use) Contain less than 1.0% as Ca.
	58001-41	20kg		
Calcium Hydroxide	58014-17	500g	White powder. Odorless, little bitter.	As enrichments, coagulant of konnyaku, neutralizer of starch syrup, for vegetables pickles. (Criteria for use) Contain less than 1.0% as Ca.
	58014-37	15kg		
Ferrous Sulfate	58000-17	500g	Whity green crystal or crystalline powder. Heptahydrate.	To enrich Fe, use as color tone stabilizer of black soybean, broad bean, kelp, pickled eggplant.
	58000-41	20kg		
Cupric Sulfate	58003-17	500g	Blue crystal or crystalline powder.	Strengthening agent for substitution food of breast milk. This product and preparation which contain this product can be used only for substitution food of breast milk.
	58003-41	20kg		
Zinc Sulfate	58008-17	500g	Colorless crystal or white crystalline powder. Odorless.	
	58008-41	20kg		
Potassium Carbonate	58010-17	500g	White granule. Easy to dissolve in water and the water solution is alkaline.	Ingredient of salt water. As pH adjuster, yeast food and leavening agent.
Sodium Bicarbonate	58024-17	500g	White crystalline. Odorless and salty taste. Water solution is alkaline.	As leavening agent, blowing agent for powder drink etc., pH adjuster, production of salt water.
Magnesium Chloride	58013-17	500g	Colorless - white crystal. Easy to dissolve in water and the water solution is neutrality.	As coagulant for Tofu, for production of seafood-paste, Mg supplement of yeast food.
Magnesium Sulfate	58042-17	500g	Colorless columnar or needle crystal. Effloresce in dry air and become white crystalline. Dissolve in water.	As Mg supplement of water for brewing or fermentation assistant etc., The production is effective to improve taste of sake and synthetic sake. Also used as coagulant of soy milk.
	58828-41	20kg		
Potassium Hydroxide	58020-17	500g	White granular. Hygroscopic and deliquescence. Generating heat by adding water. The water solution is strong alkaline.	As neutralizer for various processed foods. (Criteria for use) must neutralize or remove before completion of the food.
	58020-41	20kg		
Sodium Hydroxide	58009-17	500g		For production of canned orange and peach, used as neutralizer for soy sauce and hydrolyzed protein etc.. (Criteria for use) must neutralize or remove before completion of the food.
	58009-41	20kg		
Sodium Carbonate	58029-17	500g	White powder or granular crystal. Easy to dissolve in water. Hygroscopic but no deliquescence.	As ingredient of salt water, pH adjuster and leavening agent.
Sodium Nitrite	58002-17	500g	White or pale yellow crystal. Deliquescence and easy to dissolve in water. The water solution is alkaline..	As color former or preservative for meat product. (Criteria for use) Defined applicable food and maximum use quantity. 「Food coloring or artificial coloring」

VITAMINS • AMINO ACIDS

Product name	Catalog No.	Size	Ingredient • Property	Principal use
L-Ascorbic Acid	58817-30	1kg	White-yellowish white crystal or crystalline powder. Odorless and sour taste. Easy to dissolve in water.	To enrich vitamin C of foods, for antioxidation, keeping freshness, preventing discoloration, coloring auxiliary agent for meat. 「Antioxidant」
	58818-30	1kg		
	58818-37	15kg		
Sodium L-ascorbate	58049-17	500g	White-yellowish white crystal or crystalline powder. Odorless and slightly salty taste. Easily dissolve in water than L-Ascorbic Acid.	
Vitamin B ₁₂ 0.1% WS	58229-13	100g	Pale red color powder. Cyanocobalamin 0.1% powder. <Excipient> Dextrin, citric acid, citric acid Na	To enrich vitamin B ₁₂ of foods.
L(+)-Arginine	58050-17	500g	White crystal or crystalline powder.	Nutrient enrichment of foods, health foods, drink.
L-Glutamic acid	58052-17	500g	Colorless - White crystal or crystalline powder.	Nutrient enrichment of foods, improve Seasoning etc.
Thiamine hydrochloride (Vitamin B ₁)	58240-17 (New)	500g	White - yellowish color fine crystal or crystalline powder. Bitter taste. Dissolve in water and ethanols.	Strengthening agent for rice, bread, soy sauce, jam etc.
Thiamine nitrate (Vitamin B ₁)	58241-17 (New)	500g	White - yellowish color fine crystal or crystalline powder. Hardly dissolve in water and low in hygroscopicity.	Strengthening agent (Hardly dissolve in water in comparison with thiamine hydrochloride)
Riboflavin (Vitamin B ₂)	Coming soon	500g	Yellow - orange color crystal or crystalline powder. Bitter taste. Hardly dissolve in water and ethanol.	Strengthening agent for rice, bread, miso, biscuit, chocolate, curry roux, sauce etc.
Tocopherol (Vitamin E)	Coming soon	500g	Yellow - red-brown clear color viscous liquid and odorless.	Strong antioxidation action.
Pyridoxine hydrochloride (Vitamin B ₆)	58504-17 (New)	500g	White - yellowish color crystal or crystalline powder. Odorless. Dissolve in water but hardly dissolve in ethanol.	Strengthening agent (Add 0.1mg of the product to 100g of modified milk powder)
DL-Alanine	Coming soon	500g	Colorless - white crystalline powder. Sweet taste.	Seasoning raw material of synthetic sake, adding richness to mixed sweetener, sour corrigent of soft drink, improvement of flavor for foods.
Calcium pantothenate	58505-17 (New)	500g	White powder, odorless and little bitter taste.	Strengthening agent (Add 0.1mg of the product to 100g of modified milk powder) (Criteria for use) Contain less than 1.0% as Ca.
olic acid	58502-13 (New)	100g	Yellow - orange color crystalline powder. Odorless.	Strengthening agent (Add 0.3mg of the product to 100g of modified milk powder)

SACCHARIDE

Product name	Catalog No.	Size	Ingredient • Property	Principal use
Xylitol	Coming soon	500g	White crystal or crystalline powder. Odorless and sweet taste.	Sweetener, non caries-causing sweetener of gum, tablet candy, candy, chocolate etc., toothpaste.

Kanto Chemical adjusts various mixture and concentration by your request.

<Kanto Chemical's Facilities for additives for food production>



POWDER MIXING MACHINE



GRANULATION APPARATUS



CONICAL DRYER



SOLUTION TANK



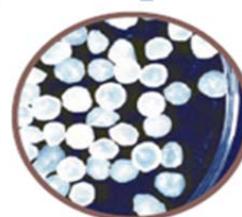
CONCENTRATION ADJUSTMENT TANK

Sodium hydroxide and Potassium hydroxide

We Kanto Chemical is “Only One Manufacturer” of mass production for pellet type of Alkali. Our Alkali pellet is Spherical shape, then surface area is smaller than flake shape, is less absorption moisture and easy to handling.

【 Features 】

- ① Using High purity Liquid Alkali, concentrate and pelletize it. So quality is equal as GR grade which extremely low contains metallic impurity.
- ② Spherical shape. Less Absorption moisture. Easy to handling.
- ③ Uniform particle size. Easier to dissolve than flake type.



Sodium hydroxide (granular) (APP.5~7mm)

● ● Sodium Hydroxide ● ● ●

Food Additive Specification			
Guranteed Value	Item	Unit	Specification
	Assay	%	min. 95.0
	Property		to pass test
	Identity (1)		to pass test
	Identity (2)		to pass test
	Solubility		to pass test
	Sodium carbonate	%	max. 2.0
	Heavy metals (as Pb)	μg/g	max. 30
	Mercury (as Hg)	μg/g	max. 0.10
	Arsenic (as As ₂ O ₃)	μg/g	max. 4.0

Reference Value	Item	Unit	Actual Value
	Purity	%	98.4
	Chloride (Cl)	ppm	5
	Phosphate (PO ₄)	ppm	max. 1
	Silicate (SiO ₂)	ppm	max. 2
	Sulfate (SO ₄)	ppm	max. 5
	Nitrogen oxide (as N)	ppm	max. 3
	Potassium (K)	%	0.02
	Magnesium (Mg)	ppm	max. 0.5
	Calcium (Ca)	ppm	max. 4
	Zinc (Zn)	ppm	max. 2
	Aluminum (Al)	ppm	max. 2
	Lead (Pb)	ppm	max. 1
	Iron (Fe)	ppm	max. 0.5
	Nickel (Ni)	ppm	max. 2
Sodium carbonate (Na ₂ CO ₃)	%	0.25	

● ● Potassium Hydroxide ● ● ●

Food Additive Specification			
Guranteed Value	Item	Unit	Specification
	Assay	%	85.0~100.5
	Property		to pass test
	Identity (1)		to pass test
	Identity (2)		to pass test
	Solubility		to pass test
	Potassium carbonate	%	max. 1.75
	Heavy metals (as Pb)	μg/g	max. 15
	Lead (as Pb)	μg/g	max. 5
	Mercury (as Hg)	μg/g	max. 0.10
	Arsenic (as As ₂ O ₃)	μg/g	max. 2.0
	Sodium		to pass test
	Chloride (as Cl)	%	max. 0.050

Reference Value	Item	Unit	Actual Value
	Purity	%	85.0~100.5
	Chloride (Cl)	ppm	20
	Phosphate (PO ₄)	ppm	max. 1
	Silicate (SiO ₂)	ppm	max. 5
	Sulfate (SO ₄)	ppm	max. 5
	Nitrogen oxide (as N)	ppm	max. 5
	Sodium (Na)	%	0.1
	Magnesium (Mg)	ppm	max. 1
	Calcium (Ca)	ppm	max. 5
	Zinc (Zn)	ppm	max. 2
	Aluminum (Al)	ppm	max. 2
	Lead (Pb)	ppm	max. 1
	Iron (Fe)	ppm	max. 0.3
	Nickel (Ni)	ppm	max. 2
Sodium carbonate (Na ₂ CO ₃)	%	0.4	

Ferric Pyrophosphate solution

This product is slurried liquid which contain 3% of ferric pyrophosphate and easy to process as a iron enhancer for various foods.

【 Features 】

- ① Oderless and a little metallic taste, no affect food taste and flavor
So quality is equal as GR grade which extremely low contains metallic impurity.
- ② Small particle in a solution and available to miniaturize by Homogenizer
(avg. : aroud $3.6\mu\text{m}$ particle size)



Package size	500g (P.P. bottle) 10kg (P.P.tank)
Usage application	Enrichments
Example of use	Modified milk powder, Baby food, Jelly
Iron Contents	0.749~1.049 (as Fe) (Calculated value)
Specification	

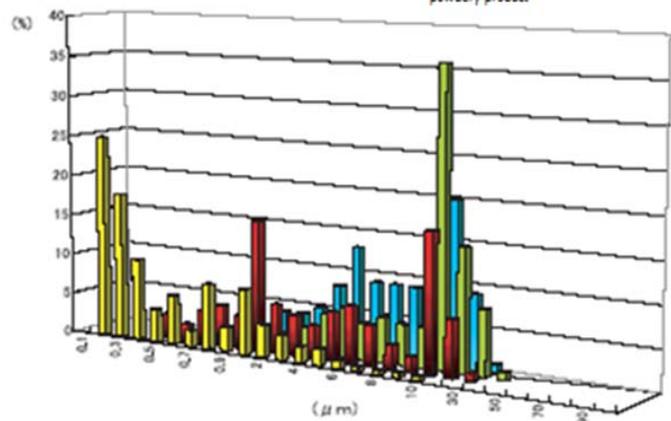
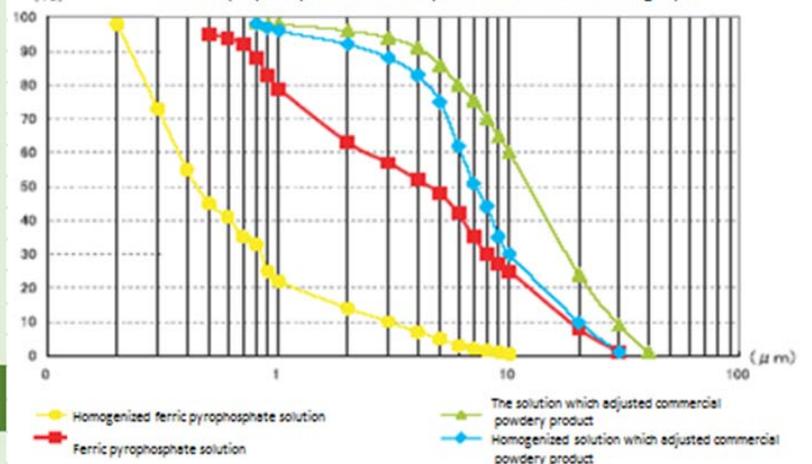
Physical and chemical properties White-pale yellow, Oderless and a little metallic taste

Validation test (1), (2) to pass test

Purity test

- (1) Solubility
- (2) Chloride (Cl) max. 0.35%
- (3) Sulfate (SO₄) max. 0.0002%
- (4) Heavy metals (as Pb) max. $4.0\mu\text{g/g}$
- (5) Arsenic (as A₂sO₃) max. $0.2\mu\text{g/g}$
- (6) Assay [as Fe₄(P₂O₇)₃] 2.5%~3.5%

Ferric Pyrophosphate solution particle size distribution graph



Please contact us if you concern about other additives for food production

Reagents

Kanto Chemical manufacture, research • develop and supply many kinds of chemical reagent such as salinity, sugar, viscosity and peroxide value inspection for lab as “General reagent manufacturer.”



Inspection products of microorganism in food

We supply mediums, simplified inspection kit • equipment which are ISO compliant products for inspection of microorganism in food.

We also manufacture on assignment and supply in large quantities for mediums.

