

# Highly Pure Reagent Series Primepure™



Kanto Reagents

- ✦ The Highest Purity
- ✦ ppb-level guaranteed metal impurities
- ✦ Reduce organic impurities to a minimum

Novel, highest quality Reagent “Primepure™” series lead your research or production procedure to new higher, reliable stage. “Primepure™” have the highest purity and broad specifications and provide strong support for your work with its Japanese qualities.



Cat.No.	Chemical Name	Purity	Specification Name	Package
01060-79	Acetone	>99.9 % (GC)	Primepure(M,Org)	1 L
01149-79	Acetonitrile	>99.9 % (GC)	Primepure(M)	1 L
01948-79	2-Acetoxy-1-methoxypropane	>99.9 % (GC)	Primepure(M)	1 L
25258-79	2-Butanone	>99.8 % (GC)	Primepure(M)	1 L
04349-79	Butyl acetate	>99.8 % (GC)	Primepure(M)	1 L
04418-79	tert-Butyl methyl ether	>99.9 % (GC)	Primepure(M,Nvm)	1 L
04418-76				3 L
07278-79	Chloroform	>99.7 % (GC)	Primepure(M,Nvm)	1 L
07547-79	Cyclohexane	>99.9 % (GC)	Primepure(M,Org)	1 L
10158-79	Dichloromethane	>99.9 % (GC)	Primepure(M)	1 L
32463-79	Diisopropyl ether	>99.0 % (GC)	Primepure(M)	1 L
11720-79	N,N-Dimethylformamide	>99.9 % (GC)	Primepure(M,Org)	1 L
10425-79	1,4-Dioxane (1,4=p)	>99.9 % (GC)	Primepure(M)	1 L
14032-79	Ethanol	>99.9 % (GC)	Primepure(M)	1 L
14029-79	Ethyl acetate	>99.9 % (GC)	Primepure(M,Nvm,Org)	1 L
18635-79	Hexane	>96.0 % (GC)	Primepure(M,Nvm)	1 L
18512-79	Heptane	>99.3 % (GC)	Primepure(M,Nvm)	1 L
25202-79	Methanol	>99.9 % (GC)	Primepure(M,Org)	1 L
25202-78				3 L
14127-79	2-Methoxyethanol	>99.9 % (GC)	Primepure(M)	1 L
25214-79	4-Methyl-2-pentanone	>99.9 % (GC)	Primepure(M)	1 L
07250-79	Monochlorobenzene	>99.9 % (GC)	Primepure(M)	1 L
32434-79	1-Propanol	>99.9 % (GC)	Primepure(M,Org)	1 L
32998-79	2-Propanol	>99.9 % (GC)	Primepure(M)	1 L
32485-79	Pyridine	>99.9 % (GC)	Primepure(M,Org)	1 L
40060-79	Tetrahydrofuran (stabilizer free)	>99.9 % (GC)	Primepure(M)	1 L
40180-79	Toluene	>99.9 % (GC)	Primepure(M)	1 L
31005-78	2,2,4-Trimethylpentane	>99.7 % (GC)	Primepure(M)	1 L

※(M): Metal Impurities, (Org): Organic Impurities, (Nvm): Non-volatile matters



Kanto Chemical Co., Inc.

Specifications		Acetone	Acetonitrile	2-Acetoxy-1-methoxypropane (PGMEA)	2-Butanone	Butyl acetate	Ethyl acetate	4-Methyl-2-pentanone	tert-Butyl methyl ether	N,N-Dimethyl formamide
Purity (GC)	min.	99.9 %	99.9 %	99.9 %	99.8 %	99.8 %	99.9 %	99.9 %	99.9 %	99.9 %
Appearance	max.	-	-	-	-	-	5 Hazen	-	-	10 Hazen
Miscibility with water		to pass test	to pass test	to pass test	to pass test	-	-	-	-	to pass test
Miscibility with ethanol		-	-	-	-	-	-	to pass test	-	to pass test
Density (20°C)	g/mL	0.789-0.792	0.780-0.784	0.966-0.974	0.803-0.807	0.878-0.883	0.898-0.902	0.799-0.804	0.738-0.744	0.947-0.952
Refractive index n		1.358-1.360	1.343-1.346	1.399-1.404	1.378-1.381	1.392-1.397	1.370-1.374	1.394-1.397	1.366-1.372	1.428-1.432
Water	max.	0.2 %	0.1 %	0.1 %	0.1 %	0.1 %	0.05 %	0.1 %	0.1 %	0.1 %
Non-volatile matter	max.	1 ppm	0.001 %	-	0.001 %	0.002 %	2 ppm	0.001 %	2 ppm	0.002 %
Acid (as HCOOH)	max.	-	-	-	-	-	-	-	-	0.003 %
Acid (as CH <sub>3</sub> COOH)	max.	0.001 %	0.001 %	0.02 %	0.005 %	0.003 %	0.005 %	0.01 %	0.01 %	-
Base (as NH <sub>3</sub> )	max.	5 ppm	-	-	-	-	-	-	-	0.002 %
Aldehyde (as HCHO)	max.	3 ppm	-	-	-	-	-	-	-	-
Chloride (Cl)	max.	-	-	0.3 ppm	-	-	-	-	-	-
Hydrogen cyanide		-	to pass test	-	-	-	-	-	-	-
Methanol(GC)	max.	0.05 %	-	-	-	-	0.1 %	-	-	-
Ethanol(GC)	max.	0.05 %	-	-	-	-	0.1 %	-	-	-
1-Butanol(GC)	max.	-	-	-	-	0.3 %	-	-	-	-
2-Butanone(GC)	max.	-	-	-	-	-	0.1 %	-	-	-
Methyl acetate(GC)	max.	-	-	-	-	-	0.1 %	-	-	-
Isopropyl acetate(GC)	max.	-	-	-	-	-	0.1 %	-	-	-
Ethyl propionate(GC)	max.	-	-	-	-	-	0.1 %	-	-	-
sec-Butyl acetate(GC)	max.	-	-	-	-	-	0.1 %	-	-	-
Butyl formate(GC)	max.	-	-	-	-	0.1 %	-	-	-	-
2-Methylpropyl acetate(GC)	max.	-	-	-	-	0.5 %	-	-	-	-
Dimethylamine(GC)	max.	-	-	-	-	-	-	-	-	0.05 %
4-Hydroxy-4-methyl-2-pentanone(GC)	max.	0.01 %	-	-	-	-	-	-	-	-
Peroxide (as H <sub>2</sub> O <sub>2</sub> )	max.	-	-	-	-	-	-	-	0.001 %	-
Substances reducing permanganate	max.	2 ppm	to pass test	-	0.002 % (as O)	-	-	-	-	-
Substances darkened by sulfuric acid		-	-	-	to pass test	to pass test	to pass test	to pass test	-	-
Silver (Ag)	max.	1 ppb	1 ppb	1 ppb	1 ppb	1 ppb	1 ppb	1 ppb	1 ppb	1 ppb
Aluminium (Al)	max.	10 ppb	10 ppb	10 ppb	10 ppb	10 ppb	10 ppb	10 ppb	10 ppb	10 ppb
Barium (Ba)	max.	10 ppb	10 ppb	10 ppb	10 ppb	10 ppb	10 ppb	10 ppb	10 ppb	10 ppb
Beryllium (Be)	max.	10 ppb	10 ppb	10 ppb	10 ppb	10 ppb	10 ppb	10 ppb	10 ppb	10 ppb
Bismuth (Bi)	max.	10 ppb	10 ppb	10 ppb	10 ppb	10 ppb	10 ppb	10 ppb	10 ppb	10 ppb
Calcium (Ca)	max.	10 ppb	10 ppb	50 ppb	10 ppb	10 ppb	10 ppb	10 ppb	10 ppb	50 ppb
Cadmium (Cd)	max.	1 ppb	1 ppb	5 ppb	1 ppb	1 ppb	1 ppb	1 ppb	1 ppb	1 ppb
Cobalt (Co)	max.	1 ppb	1 ppb	1 ppb	1 ppb	1 ppb	1 ppb	1 ppb	1 ppb	1 ppb
Chromium (Cr)	max.	2 ppb	2 ppb	2 ppb	2 ppb	2 ppb	2 ppb	2 ppb	2 ppb	2 ppb
Copper (Cu)	max.	1 ppb	1 ppb	10 ppb	1 ppb	1 ppb	1 ppb	1 ppb	1 ppb	5 ppb
Iron (Fe)	max.	10 ppb	10 ppb	10 ppb	10 ppb	10 ppb	10 ppb	10 ppb	10 ppb	10 ppb
Gallium (Ga)	max.	10 ppb	10 ppb	10 ppb	10 ppb	10 ppb	10 ppb	10 ppb	10 ppb	10 ppb
Potassium (K)	max.	10 ppb	10 ppb	30 ppb	10 ppb	10 ppb	10 ppb	10 ppb	10 ppb	50 ppb
Lithium (Li)	max.	1 ppb	1 ppb	1 ppb	1 ppb	1 ppb	1 ppb	1 ppb	1 ppb	1 ppb
Magnesium (Mg)	max.	5 ppb	10 ppb	10 ppb	10 ppb	10 ppb	10 ppb	10 ppb	10 ppb	50 ppb
Manganese (Mn)	max.	1 ppb	1 ppb	1 ppb	1 ppb	1 ppb	1 ppb	1 ppb	1 ppb	1 ppb
Sodium (Na)	max.	10 ppb	50 ppb	50 ppb	10 ppb	10 ppb	10 ppb	10 ppb	10 ppb	100 ppb
Nickel (Ni)	max.	1 ppb	1 ppb	1 ppb	1 ppb	1 ppb	1 ppb	1 ppb	1 ppb	1 ppb
Lead (Pb)	max.	1 ppb	1 ppb	5 ppb	1 ppb	1 ppb	1 ppb	1 ppb	1 ppb	5 ppb
Strontium (Sr)	max.	1 ppb	1 ppb	1 ppb	1 ppb	1 ppb	1 ppb	1 ppb	1 ppb	1 ppb
Thallium (Tl)	max.	10 ppb	10 ppb	10 ppb	10 ppb	10 ppb	10 ppb	10 ppb	10 ppb	10 ppb
Zinc (Zn)	max.	1 ppb	1 ppb	50 ppb	10 ppb	10 ppb	1 ppb	10 ppb	1 ppb	5 ppb

#### ▼ Stabilizer

Products	Stabilizer
Chloroform	Amylene
Diisopropyl ether	Hydroquinone
1,4-Dioxane	BHT
Tetrahydrofuran	(Not stabilized)

Specifications		Monochlorobenzene	Pyridine	Ethanol	Methanol	1-Propanol	2-Propanol	Chloroform	Dichloromethane
Purity (GC)	min.	99.9 %	99.9 %	99.9 %	99.9 %	99.9 %	99.9 %	99.7 %	99.9 %
Appearance	max.	-	-	-	-	-	-	-	10 Hazen
Miscibility		to pass test (with ethanol)	to pass test (with water)	-	to pass test (with water)	to pass test (with water)	to pass test (with water)	-	-
Density (20°C)	g/mL	1.097-1.109	-	0.789-0.791	0.791-0.793	0.801-0.806	0.784-0.786	1.487-1.497	1.320-1.330
Refractive index n		1.523-1.526	-	1.360-1.363	1.327-1.330	1.383-1.387	1.376-1.379	-	-
Water	max.	0.05 %	0.1 %	0.2 %	0.03 %	0.2 %	0.05 %	0.05 %	0.05 %
Non-volatile matter	max.	-	0.002 %	5 ppm	5 ppm	0.001 %	5 ppm	2 ppm	0.001%
Acidity	max.	to pass test	-	-	-	-	-	-	-
Acid	max.	-	-	0.002 % (as CH <sub>3</sub> COOH)	0.002 % (as HCOOH)	-	-	0.001 % (as HCl)	0.01 % (as HCl)
Acid (as C <sub>2</sub> H <sub>3</sub> COOH)	max.	-	-	-	-	0.002 %	0.001 %	-	-
Base	max.	-	-	0.5 ppm (as NH <sub>3</sub> )	3 ppm (as NH <sub>3</sub> )	-	0.5 ppm (as NaOH)	-	-
Alkalinity		to pass test	-	-	-	-	-	-	-
Formaldehyde	max.	-	-	-	0.001 %	-	-	-	-
Acetaldehyde	max.	-	-	-	0.001 %	-	-	-	-
Aldehyde and ketone	max.	-	-	5 ppm (as CH <sub>3</sub> COOH <sub>3</sub> )	-	-	-	-	-
Carbonyl compounds (as CO)	max.	-	-	-	0.001 %	-	0.005 %	0.005 %	-
Chloride (Cl)	max.	-	0.001 %	-	-	-	-	1 ppm	-
Free chlorine	max.	to pass test	-	-	-	-	-	1 ppm (as Cl)	to pass test
Sulfate(SO <sub>4</sub> )	max.	-	0.001 %	-	-	-	-	-	-
Ammonium(NH <sub>4</sub> )	max.	-	0.002 %	-	-	-	-	-	-
Acetone(GC)	max.	-	-	-	0.001 %	0.01 %	0.001 %	-	-
Methanol(GC)	max.	-	-	0.02 %	-	-	0.1 %	-	-
Ethanol (GC)	max.	-	-	-	0.05 %	0.01 %	-	-	-
1-Propanol(GC)	max.	-	-	0.005 %	-	-	0.001 %	-	-
2-Propanol(GC)	max.	-	-	0.01 %	-	0.01 %	-	-	-
1-Butanol(GC)	max.	-	-	0.005 %	-	-	-	-	-
2-Picoline(GC)	max.	-	0.01 %	-	-	-	-	-	-
Piperidine(GC)	max.	-	0.01 %	-	-	-	-	-	-
Substances reducing permanganate	max.	-	to pass test (as O)	to pass test	5 ppm (as O)	-	-	-	-
Substances darkened by sulfuric acid		-	-	to pass test	to pass test	to pass test	to pass test	-	to pass test
Substances darkened by potassium hydroxide		-	-	to pass test	-	-	-	-	-
Iodine-consuming substances		-	-	-	-	-	-	-	to pass test
Suitability for use in dithizone tests		-	-	-	-	-	-	to pass test	-
Silver (Ag)	max.	1 Ppb	1 ppb	1 ppb	1 ppb	1 ppb	1 ppb	1 ppb	1 ppb
Aluminium (Al)	max.	10 ppb	10 ppb	10 ppb	10 ppb	10 ppb	10 ppb	10 ppb	10 ppb
Barium (Ba)	max.	10 ppb	10 ppb	10 ppb	10 ppb	10 ppb	5 ppb	10 ppb	10 ppb
Beryllium (Be)	max.	10 ppb	10 ppb	10 ppb	10 ppb	10 ppb	5 ppb	10 ppb	10 ppb
Bismuth (Bi)	max.	10 ppb	10 ppb	10 ppb	10 ppb	10 ppb	5 ppb	10 ppb	10 ppb
Calcium (Ca)	max.	50 ppb	50 ppb	10 ppb	10 ppb	50 ppb	5 ppb	10 ppb	10 ppb
Cadmium (Cd)	max.	1 ppb	5 ppb	1 ppb	1 ppb	1 ppb	1 ppb	1 ppb	1 ppb
Cobalt (Co)	max.	1 ppb	1 ppb	1 ppb	1 ppb	1 ppb	1 ppb	1 ppb	1 ppb
Chromium (Cr)	max.	2 ppb	2 ppb	2 ppb	2 ppb	2 ppb	2 ppb	2 ppb	2 ppb
Copper (Cu)	max.	5 ppb	50 ppb	5 ppb	1 ppb	5 ppb	5 ppb	1 ppb	1 ppb
Iron (Fe)	max.	10 ppb	50 ppb	10 ppb	10 ppb	10 ppb	5 ppb	10 ppb	10 ppb
Gallium (Ga)	max.	10 ppb	10 ppb	10 ppb	10 ppb	10 ppb	5 ppb	10 ppb	10 ppb
Potassium (K)	max.	50 ppb	50 ppb	10 ppb	10 ppb	50 ppb	5 ppb	10 ppb	10 ppb
Lithium (Li)	max.	1 ppb	1 ppb	1 ppb	1 ppb	1 ppb	1 ppb	1 ppb	1 ppb
Magnesium (Mg)	max.	50 ppb	50 ppb	10 ppb	10 ppb	50 ppb	5 ppb	10 ppb	10 ppb
Manganese (Mn)	max.	1 ppb	1 ppb	1 ppb	1 ppb	1 ppb	1 ppb	1 ppb	1 ppb
Sodium (Na)	max.	50 ppb	50 ppb	100 ppb	50 ppb	50 ppb	50 ppb	10 ppb	10 ppb
Nickel (Ni)	max.	1 ppb	1 ppb	1 ppb	1 ppb	5 ppb	1 ppb	1 ppb	1 ppb
Lead (Pb)	max.	5 ppb	5 ppb	1 ppb	1 ppb	10 ppb	1 ppb	1 ppb	1 ppb
Strontium (Sr)	max.	1 ppb	1 ppb	1 ppb	1 ppb	1 ppb	1 ppb	1 ppb	1 ppb
Thallium (Tl)	max.	10 ppb	10 ppb	-	10 ppb	10 ppb	-	10 ppb	10 ppb
Zinc (Zn)	max.	10 ppb	50 ppb	1 ppb	5 ppb	10 ppb	1 ppb	1 ppb	1 ppb
UV absorbance 210 nm	max.	-	-	0.70	-	-	0.70	-	-
UV absorbance 230 nm	max.	-	-	-	-	-	0.20	-	-
UV absorbance 254 nm	max.	-	-	0.03	-	-	0.03	-	-
UV absorbance 280 nm	max.	-	-	0.01	-	-	0.01	-	-

Specifications		Diisopropyl ether	1,4-Dioxane (1,4=)	2-Methoxy-ethanol	Tetrahydrofuran	Heptane	Hexane	2,2,4-trimethylpentane	Cyclohexane	Toluene
Purity (GC)	min.	99.0 %	99.9 %	99.9 %	99.9 %	99.3 %	96.0 %	99.7 %	99.9 %	99.9 %
Appearance	max.	-	10 Hazen	-	-	-	-	-	-	-
Miscibility with water		-	to pass test	to pass test	-	-	-	-	-	-
Freezing point		-	11.0°C	-	-	-	-	-	6.0-7.5°C	-
Density (20°C)	g/mL	0.720-0.734	1.030-1.035	0.962-0.967	0.884-0.889	0.682-0.686	0.659-0.662	0.690-0.693	0.778-0.779	0.864-0.868
Refractive index n		1.366-1.371	-	1.401-1.404	1.406-1.408	1.387-1.389	-	1.390-1.393	1.425-1.427	1.496-1.498
Water	max.	0.1 %	0.1 %	0.1 %	0.05 %	0.01 %	0.01 %	0.01 %	0.01 %	0.03 %
Non-volatile matter	max.	0.02 %	0.01 %	0.002 %	0.001 %	2 ppm	1 ppm	5 ppm	0.002 %	0.001 %
Acid (as HCl)	max.	-	-	-	-	-	-	-	-	0.001 %
Acid (as CH <sub>3</sub> COOH)	max.	0.01 %	0.01 %	0.005 %	0.01 %	0.001 %	0.002 %	0.001 %	-	-
Base (as NaOH)	max.	-	-	-	-	-	-	-	-	0.001 %
Aldehyde	max.	-	to pass test	-	-	-	-	-	-	-
Sulfur compounds (as S)	max.	-	-	-	-	-	-	-	-	0.003 %
Fats and oils		-	-	-	-	-	to pass test	-	-	-
Thiophene		-	-	-	-	-	-	-	-	to pass test
Thiophene homologue		-	-	-	-	-	to pass test	-	-	-
Cyclohexene(GC)	max.	-	-	-	-	-	-	-	0.05 %	-
Benzene(GC)	max.	-	-	-	-	-	1 ppm	-	0.05 %	-
Methylcyclohexane	max.	-	-	-	-	-	-	-	0.05 %	-
Peroxide (as H <sub>2</sub> O <sub>2</sub> )	max.	0.001 %	0.05 %	-	0.01 %	5 ppm	-	5 ppm	-	-
Sulfides and reducing substances		-	-	-	-	-	to pass test	-	to pass test (as O)	-
Substances darkened by sulfuric acid		-	-	to pass test	-	to pass test	to pass test	to pass test	to pass test	to pass test
Silver (Ag)	max.	1 ppb	1 ppb	1 ppb	1 ppb	1 ppb	1 ppb	1 ppb	1 ppb	1 ppb
Aluminium (Al)	max.	10 ppb	10 ppb	10 ppb	10 ppb	10 ppb	10 ppb	10 ppb	10 ppb	10 ppb
Barium (Ba)	max.	10 ppb	10 ppb	10 ppb	10 ppb	10 ppb	10 ppb	10 ppb	10 ppb	10 ppb
Beryllium (Be)	max.	10 ppb	10 ppb	10 ppb	10 ppb	10 ppb	10 ppb	10 ppb	10 ppb	10 ppb
Bismuth (Bi)	max.	10 ppb	10 ppb	10 ppb	10 ppb	10 ppb	10 ppb	10 ppb	10 ppb	10 ppb
Calcium (Ca)	max.	50 ppb	50 ppb	50 ppb	50 ppb	50 ppb	10 ppb	50 ppb	10 ppb	10 ppb
Cadmium (Cd)	max.	5 ppb	1 ppb	1 ppb	5 ppb	1 ppb	1 ppb	1 ppb	1 ppb	1 ppb
Cobalt (Co)	max.	1 ppb	1 ppb	1 ppb	1 ppb	1 ppb	1 ppb	1 ppb	1 ppb	1 ppb
Chromium (Cr)	max.	2 ppb	2 ppb	2 ppb	2 ppb	2 ppb	2 ppb	2 ppb	2 ppb	2 ppb
Copper (Cu)	max.	5 ppb	5 ppb	10 ppb	5 ppb	5 ppb	1 ppb	5 ppb	5 ppb	5 ppb
Iron (Fe)	max.	10 ppb	10 ppb	10 ppb	10 ppb	10 ppb	10 ppb	10 ppb	10 ppb	10 ppb
Gallium (Ga)	max.	10 ppb	10 ppb	10 ppb	10 ppb	10 ppb	10 ppb	10 ppb	10 ppb	10 ppb
Potassium (K)	max.	50 ppb	50 ppb	50 ppb	50 ppb	50 ppb	10 ppb	50 ppb	10 ppb	10 ppb
Lithium (Li)	max.	1 ppb	1 ppb	1 ppb	1 ppb	1 ppb	1 ppb	1 ppb	1 ppb	1 ppb
Magnesium (Mg)	max.	10 ppb	50 ppb	50 ppb	50 ppb	50 ppb	10 ppb	50 ppb	10 ppb	10 ppb
Manganese (Mn)	max.	1 ppb	1 ppb	1 ppb	1 ppb	1 ppb	1 ppb	1 ppb	1 ppb	1 ppb
Sodium (Na)	max.	50 ppb	50 ppb	100 ppb	50 ppb	50 ppb	10 ppb	50 ppb	10 ppb	10 ppb
Nickel (Ni)	max.	1 ppb	1 ppb	1 ppb	1 ppb	1 ppb	1 ppb	1 ppb	1 ppb	1 ppb
Lead (Pb)	max.	5 ppb	1 ppb	5 ppb	10 ppb	1 ppb	1 ppb	5 ppb	1 ppb	1 ppb
Strontium (Sr)	max.	1 ppb	1 ppb	1 ppb	1 ppb	1 ppb	1 ppb	1 ppb	1 ppb	1 ppb
Thallium (Tl)	max.	10 ppb	10 ppb	10 ppb	10 ppb	10 ppb	10 ppb	10 ppb	10 ppb	10 ppb
Zinc (Zn)	max.	50 ppb	10 ppb	50 ppb	50 ppb	10 ppb	1 ppb	10 ppb	1 ppb	1 ppb

Notice) The contents of the product specifications listed in this brochure are subject to change without notice.

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