

Potassium Citrate, USP/FCC

(Excipient/Food Use)

092310

Acidulant

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Description

Potassium citrate is a highly soluble monohydrate salt, derived from citric acid and available as a crystalline granular material.

Potassium citrate may be used as a partial or complete replacement for sodium citrate when reduced sodium or sodium free products are desired. Federal Standards of Identity for processed cheese allow the use of potassium citrate as an emulsifying salt. The substitution of potassium salt for sodium citrate will reduce the sodium content by 720 mg per 100 g product at 3% salt level. Potassium citrate will reduce sodium content in beverages, gelatin desserts, confections, jams and jellies.

Potassium citrate may also be used as a source of potassium ion either as a nutritional supplement or to maximize gelation of kappa-carrageenan gels in applications such as surimi analogues.

General Characteristics

Formula	$K_3C_6H_5O_7 \cdot H_2O$
Molecular Weight	324.42
Potassium Content	36.1 - 37.2 %
Loss on Drying	3 - 6 %
pH (5 g/100 ml at 25°C)	7.5 - 9.0
Solubility (g/100 ml at 25°C)	
Water	190
Alcohol	Insoluble
Ether	Insoluble

Standard Specifications

Appearance	White coarse powder, essentially free of foreign matter
Odor	None
Identification	Meets USP/FCC
Assay (dried basis)	99.0 to 100.5 %
Loss on Drying	3.0 - 6.0 %
Alkalinity	Meets USP/FCC
Tartrate	Meets USP
Heavy Metals (as lead)	Maximum 10.0 ppm
Lead	Maximum 2 ppm

Ingredients

Potassium Citrate

Storage

This product is very hygroscopic and must be protected, during storage, from exposure to high temperatures and relative humidity. Storage below 75°F and 55% relative humidity in tightly sealed container is recommended. However, it is recommended to use the product within three years.

Potassium citrate readily deliquesces in moist air. Adherence to the above storage conditions is highly recommended. Inspect product after six months of storage. Other than possible caking or altered water content, no effect of product is anticipated from longer storage periods.

It is suggested that all products be used on a "First-In First-Out" basis.

Granulations

	US Sieves (microns)
Granular	On No. 16 (1180 μ), maximum 1% Through No. 100 (150 μ), maximum 10%

Packaging & Packaging Code

Granular	50 lb. bags	092310-0H
	200 lb drum	092310-2S
	1000 kg tote	092310-9R

Regulatory Status

This Food Additive complies with all the compendial requirements of the U.S. Pharmacopeia, Food Chemical Codex, Code of Federal Regulations, European Pharmacopoeia, British Pharmacopoeia, Japanese Pharmacopeia, and W.H.O./F.A.O. Food Additive Specification.

CAS Number: 6100-05-06

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