

# PRODUCT SPECIFICATION

DATE OF ISSUE  
30-05-2022

## POTASSIUM CARBONATE (E501)




NATUURLIJK NATUURLIJK PRODUCT CODE:  
X1633, X1634, X1635, X1636

PRODUCTION:  
11302612

**NATUURLIJK**  
**NATUURLIJK**  
*special food ingredients*

## 1. PRODUCT IDENTIFICATION

### 1.1 Supplier product information

<b>Product name</b>	Potassium carbonate		
<b>Production</b>	11302612		
<b>Product code</b>	<b>Content</b>	<b>EAN</b>	<b>Packaging</b>
X1633	90g	8718309831578	Plastic jar and screw lock cap with warranty seal. Jar =  Cap = 
X1634	220g	8718309831585	
X1635	950g	8718309831592	
X1636	12kg	8718309831608	Blue bag =  in box

### 1.2 Scientific product information

#### Single ingredient

Main use	raising agent
Chemical name	Potassium Carbonate powder
Chemical formula	$K_2CO_3$
Production method	Passing carbon dioxide into potassium hydroxide

### 1.3 Legislative product information

CAS number	584-08-7		
EU food additive	E501i		
Country of Origin	Italy		
Organic products	For the purposes of Article 19(2)(b) of Regulation (EC) No 834/2007, potassium Carbonate may be used in the manufacture of processed organic foods.		

## 2. PRODUCT INFORMATION

### 2.1 Physical and Chemical properties

	Unit	Specification	Method
Appearance		fine powder	
Colour		white	
Odour/taste		none	
Alkalinity $K_2CO_3$	%	99,90	
Potash KOH	%	0,10	
Sodium carbonate $Na_2CO_3$	%	0,50	

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Moisture content	%	0,35	
Loss on drying		0,33	180°C 4 h
Bulk density	g/cm <sup>3</sup>	1,30	20°C
Solubility	g/L	900-1105	water 20°C
Melting point	°C	891	
pH		11	1g/L 20°C
Molecular weight		138.21	

### 2.2 Microbiological data

N.A.			
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### 2.3 Chemical analyses

Iron (Fe)	ppm	1,0	
Heavy metals	ppm	1	
Chloride (Cl)	ppm	20,00	
Potassium chlorate KClO <sub>3</sub>	%	≤ 0,03	
Calcium (Ca)	ppm	≤ 100	
Arsenic (As)	ppm	0,10	
Heavy metals (Cr-Ni-Cd-etc.)	ppm	1,0	
Sulphate (SO <sub>4</sub> )	ppm	≤ 50	
Cyanide (CN)	ppm	≤ 0,5	
Mercury (Hg)	ppm	absent	
Lead (Pb)	ppm	0,10	

### 2.4 Nutritional Information

#### 2.4.1 Nutritional Values

Energy	kJ/100g	-	
Energy	kcal/100g	-	
Protein	g/100g	0	
Carbohydrate:	g/100g	0	
Of which Sugars	g/100g	0	
Polyols	g/100g	0	
Starches	g/100g	0	
Others	g/100g	0	

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Fat:	g/100g	0	
Of which Saturated	g/100g	0	
Mono-unsaturated	g/100g	0	
Poly-unsaturated	g/100g	0	
Transfatty acids	g/100g	0	
Cholesterol	mg/100g	0	
Water	g/100g	0,4	
Organic acid	g/100g	-	
Dietary fiber	g/100g	-	

### 2.4.2 Minerals

Potassium (K)	mg/100g	56297	calculated
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## 3. FOOD INTOLERANCE

### 3.1 Allergens

Yes = ✓ / No = ✗	Contains	Direct Contamination	Cross-Contamination (Risk)
Barley	✗	✗	✗
Beef	✗	✗	✗
Cacao	✗	✗	✗
Carrot	✗	✗	✗
Celery and celery products	✗	✗	✗
Cereals containing gluten and products produced with these (wheat, rye, oats, spelt, barley)	✗	✗	✗
Chicken	✗	✗	✗
Coriander	✗	✗	✗
Crustaceans and Shellfish	✗	✗	✗
Eggs and egg products	✗	✗	✗
Fish and fish products	✗	✗	✗
Glutamate	✗	✗	✗
Lupin and products thereof	✗	✗	✗

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Milk and milk products (including Lactose)	X	X	X
Molluscs and products thereof	X	X	X
Mustard and mustard products	X	X	X
Nuts and nut products (almonds, hazelnuts, walnuts)	X	X	X
Peanuts and peanut products	X	X	X
Pork	X	X	X
Sesame and sesame products	X	X	X
Soybean and soybean products	X	X	X
Sulphite (E221 - E228)	X	X	X
Sulphur dioxide (>10mg/kg)	X	X	X

### 3.2 Suitability for other diets:

Coeliacs	✓	Lactose intolerant	✓
Halal	✓	Vegans	✓
Kosher	✓	Vegetarian	✓

### 3.3 GMO Declaration:

Potassium carbonate does not contain genetically modified organisms and is not produced using raw materials of a genetically modified origin. At no stage during production does the product come into contact with genetically modified organisms.

### 3.4 Irradiation:

Potassium carbonate is not treated with ionizing radiation.

### 3.5 BSE/TSE declaration:

The used ingredients for Potassium carbonate are not of animal origin. The processing equipment and the packing material which is used to manufacture, pack or fill the products into the packing units do not come into contact with any meat or meat-by product.

### 3.6 Residual Solvents:

For the manufacturing of Potassium carbonate, no solvents are used.

## 4. STORAGE CONDITIONS

Storage conditions	In closed original packaging. Must be kept cool and dry in a well-ventilated place.
Shelf life	48 months after production, under the above mentioned conditions.

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## 5. FOOD SAFETY

### 5.1 Hygiene:

This product is produced in a facility with an on HACCP based food safety system.

### 5.2 Identifications of dangers:

**Classification of the substance**  
(Regulation (EC) No 1272/2008)


Serious eye irritation Category 2.  
Specific target organ toxicity, single exposure;  
respiratory tract irritation Category 3.  
Skin irritation Category 2.

### 5.3 Labeling, directions for use:

#### 5.3.1 Disclaimer:

These labeling directions are not required for packaging with a content of 125ml or less.

#### 5.3.2 Hazards identification:

Hazard pictogram	
Signal Word	GHS07 WARNING
Hazard Statements	H319 Causes serious eye irritation. H335 May cause respiratory irritation. H315 Causes skin irritation.

#### 5.3.3 Safety Recommendation:

Prevention	P261 Avoid breathing dust/fume/gas/mist/vapours/spray. P280 Wear protective gloves/protective clothing/eye protection/face protection.
Response	P264 Wash hands thoroughly after handling. P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. P362 Take off contaminated clothing.
Storage	P403+P233 Store in a well-ventilated place. Keep container tightly closed.

## 6. EXTENDED PRODUCT INFORMATION

### 6.1 Usage

Potassium carbonate is used as a raising agent in conjunction with an acidic material such as tartaric acid. This tricarbonat only releases carbon dioxide in combination with a sour. Just heat will not release the carbon dioxide. It is most often used in the production of the German lebkuchen (gingerbread). In the production of long-stored lebkuchen doughs, fermentation acids are formed. Also the often used invert sugar syrup in gingerbread is a sour ingredient (pH 2,5-4,5). With the strongly alkaline potassium you also get the desired wide spread of lebkuchen/gingerbread. To raise the product up instead of side ways, you have to add another leavening agent like Amonium bicarbonate (baking ammonia).

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Potassium carbonate is also used as raising agents, where it is necessary to restrict the amount of sodium or enhance the potassium in the product. Potassium carbonate is more soluble than sodium carbonate.

The neutralisation ratio of potassium with different acid ingredients (acid : potassium):  
Cream of tartar 2,7 : 1, Citric acid 0,93 : 1, Tartaric acid 1,09 : 1, lactic acid 80% 1,64 : 1.  
By neutralisation is meant the chemical reaction of the alkaline potassium with an acid (acid carrier) to form a neutral salt, carbon dioxide and water. By using this exact value the pH of the baked product is not changed and the maximum amount of carbon dioxide is released.

Example of reaction with lactic acid:

Potassium carbonate + lactic acid = potassium lactate + water + carbon dioxide



Dosage as leavening agent in pastry: 9,8gram (1,9%) on 500grams of flour.

## 6.2 Dictionary

NL	The Netherlands	kaliumcarbonaat, Kalium karbonaat, potas, pareas
GB	Great Britain (UK)	Potassium carbonate, Carbonate of potash, Pearl ash, Potash, Salt of tartar, Salt of wormwood
DE	Germany	Kaliumkarbonat, pottasche, Kaliumcarbonat, kohlen-saures Kalium
FR	France	Carbonate de potasse, carbonate de potassium, potasse
ES	Spain	Carbonato de potasa, carbonato de potasio, potasa, perla ash
PT	Portugal	Carbonato de potassio, carbonato de potássio
IT	Italy	Carbonato di potassio, potassa
DK	Denmark	Kaliumkarbonat, kaliumcarbonat, potaske
NO	Norway	Kaliumkarbonat, pottaske
SE	Sweden	Kaliumkarbonat
FI	Finland	Kaliumkarbonaatti, potaska
IS	Iceland	Pottaska
CZ	Czech Republic	Uhličitan draselný, potaš, Potassium carbonate, Kaliumcarbonat
SK	Slovak Republic	Kaliumcarbonat
HU	Hungary	Kálium-karbonát,
HR	Croatia (Hrvatska)	Kalijev karbonat
GR	Greece	ανθρακικό κάλιο, Ποτάσα
SI	Slovenia	kalijevkarbonat
PL	Poland	Węglan potasu,
RO	Romania	Carbonat de potasiu
BG	Bulgaria	Поташ
RU	Russian Federation	Карбонат калия
TR	Turkey	Potasyum karbonat

## 7. DISCLAIMER

Although we take great care in setting up this product specification, we cannot accept any liability for the completeness and fully accurateness of the information provided. The content of this Product Specification is completed to the best of our knowledge.

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This document does not dismiss the user of his legal obligations with respect to food safety.

This product specification replaces any previously issued specifications.