



Celanese Sales U.S. Ltd.
Suite 900N 222 W. Las Colinas Blvd.,
IRVING TX 75039
USA

MAYS CHEMICAL - NEW JERSEY
134 CLINTON ROAD
FAIRFIELD NJ 07004
USA

Certificate of Analysis

Nutrinova® Potassium Sorbate Granular; 40 x 25 kg sack on pallet

| | | | |
|---------------------------|-------------------|----------------------------|-------------------------------|
| Customer No.: | 2131278 | Cert Issue Date: | 12 Oct 2018 |
| Material No.: | 20008709 | Qty Shipped: | 14,000.000 KG |
| Customer Material: | 104600000-2100 | Order Item /date: | 2045651 10 / 28 Aug 2018 |
| Produced at: | Frankfurt am Main | Delivery item/date: | 85823372 900002 / 09 Oct 2018 |
| Produced on: | 28 Aug 2018 | Customer PO No.: | 1-021-00-78585-0 |
| Best before date: | 27 Aug 2021 | | |
| Country of origin: | Germany | | |

Batch 0001111404

| Characteristic | (Method) | UoM | Value | |
|---|--------------------|-----|-----------------------------------|---------------|
| Abs. max. (in Water) | (UV) | nm | 263.4 | 262.0 - 266.0 |
| Alkalinity (calc. as K ₂ CO ₃) | (FCC, Titrimetric) | % | 0.04 | max. 0.10 |
| Appearance | VISUAL | | white to yellowish-white granular | |
| Assay | (FCC, Titrimetric) | % | 100.1 | 99.0 - 101.0 |
| Heat Test (90 min/105°C) | (EC) | | no discoloration | |
| Identity Potassium | (FAO / WHO) | | Pass | |
| Identity Sorbate | (UV) | | Pass | |
| pH-value (10% solution) | (potentiometric) | | 10.0 | 8.5 - 10.5 |
| Water content | (Karl Fischer) | % | 0.05 | max. 0.50 |

The following values are based upon statistical evaluation and are adhered to with each batch.

| | | | | |
|------------------------------|-------------------|-----|----------------------|-------------|
| Aldehydes (as Formaldehyde) | (FCC, Limit-Test) | % | < 0.10 | max. 0.10 |
| Heavy metals (calc. as lead) | (Limit-Test) | ppm | < 10 | max. 10 |
| Lead | (ICP MS) | ppm | < limit of detection | 0.02 - 0.10 |
| Arsenic | (ICP MS) | ppm | < limit of detection | 0.02 - 0.10 |
| Mercury | (AAS) | ppm | < limit of detection | 0.01 - 0.01 |
| Cadmium | (ICP MS) | ppm | < limit of detection | 0.02 - 0.02 |
| Zinc | (ICP MS) | ppm | < limit of detection | 0.04 - 0.10 |
| Chloride | (IC, JSFA) | ppm | 25.8 | 0.0 - 100.0 |
| Sulfate | (IC) | ppm | < 150.0 | 0.0 - 150.0 |

Manufacturer (registered office address):

MCC PRODUCT CODE #

104600000

DISTRIBUTED BY
MAYS CHEMICAL CO, INC.



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Celanese Production Germany GmbH & Co. KG, Am Unisys-Park 1, 65843 Sulzbach (Taunus), Germany
Production Facility: Sorbates Plant, Building D 420, Industriepark Höchst, 65926 Frankfurt / Main, Germany.

Nutrinova® Potassium Sorbate meets the purity specifications of the current Celanese Food Ingredients product specification and conforms further on to the purity specifications published by FAO/WHO, those of the Food Chemicals Codex, those of the JSFA and the EU Regulation 231/2012 as amended, the regulations on preservatives applicable in the Federal Republic of Germany and other national food laws. The existing legal restrictions for the use in foods, drugs and cosmetics must be observed. Nutrinova® Potassium Sorbate is as a component of food fit for human consumption.

Nutrinova® Potassium Sorbate and its raw materials are manufactured synthetically.

Allergens Statement:

Nutrinova® Potassium Sorbate does not contain substances having allergenic properties, for which labelling is required and complies with the Regulation (EU) 1169/2011, the US Food Allergen Labeling and Consumer Protection Act of 2004 and the Japanese Food Sanitation Law.

GMO Statement:

Nutrinova® Potassium Sorbate is considered NOT genetically modified or NOT derived from a genetically modified organism as defined by the EC regulations 1830/2003/EC on labeling and traceability and 1829/2003/EC on genetically modified food and feed and their amending legislation.

Nano Statement:

Neither nanoparticles nor nanotechnology is intentionally used in the manufacturing process of Nutrinova® Potassium Sorbate.

The test results refer exclusively to the examined sample taken from the above-mentioned lot. Any copying of the test report, whether in part or in full, is not allowed without Celanese Food Ingredients's permission.

Retain sample policy:

Please be informed, that since January 1st, 2012 we store retain samples of Nutrinova® Sorbic Acid and Nutrinova® Potassium Sorbate for 4



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years from date of manufacture.

If you have any concerns with this shipment, please contact our Customer Service at phone 888-207-5517.

Celanese Food Ingredients

A handwritten signature in black ink, appearing to read "F. Gergen".

Frank Gergen.
Quality Inspector