1. Product and company identification

Trade Name

Nutrinova® Potassium Sorbate Powder

Manufacturer, importer, supplier
Celanese Sales Germany GmbH
Am Unisys-Park 1
65843 Sulzbach (Taunus)
Germany

Transportation emergency phone numbers:
For Chemical Emergency: Spill Leak Fire Exposure or Accident
Call CHEMTREC Day or Night
DOMESTIC NORTH AMERICA: 800-424-9300
INTERNATIONAL, CALL +1 703-527-3887 (collect calls accepted)

Identified uses
Food industry, Pharmaceutical

2. Hazard Identification


GHS Classification
Hazards Serious eye damage/eye irritation
Category Category 2B

Label elements
No Pictogram Required.

Signal Word Warning

Hazard Statements Causes eye irritation

Precautionary statements
Wash face, hands and any exposed skin thoroughly after handling.
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
If eye irritation persists: Get medical advice/attention.
Hazards not otherwise classified (HNOC)
May form combustible dust concentrations in air.

3. Composition/information on ingredients

<table>
<thead>
<tr>
<th>Components</th>
<th>CAS-No</th>
<th>Percent %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Potassium (E,E)-hexa-2,4-dienoate</td>
<td>24634-61-5</td>
<td>100</td>
</tr>
</tbody>
</table>

4. First aid measures

Skin
Wash off immediately with plenty of water. Get medical attention if irritation develops and persists.

Eyes
Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. Get medical attention.

Inhalation
Get medical attention immediately if symptoms occur.

Ingestion
Do NOT induce vomiting. Call a physician immediately.

5. Fire-fighting measures

NFPA: Health: 2 Flammability: 0 Instability: 0

Suitable extinguishing media
Carbon dioxide (CO2), Water spray, Foam, Dry chemical

Special exposure hazards arising from the substance or preparation itself, its combustion products, or released gases
Under conditions giving incomplete combustion, hazardous gases produced may consist of Carbon monoxide Carbon dioxide (CO2)
Combustion gases of organic materials must in principle be graded as inhalation poisons

Special protective equipment for fire-fighters
Wear self-contained breathing apparatus and protective suit.

6. Accidental release measures

Personal precautions
Avoid contact with the skin and the eyes. Keep away from heat and sources of ignition. Provide adequate ventilation.

Environmental precautions
Prevent further leakage or spillage. Do not discharge into the drains/surface waters/groundwater.
Methods for cleaning up
Use mechanical handling equipment. Dispose of in accordance with local regulations.

Authority Notification
Within the United States, call the National Response Center (800-424-8802) and appropriate state and local authorities if the quantity released over 24 hours is equal to or greater than the reportable quantity listed below:

7. Handling and storage

Advice on safe handling
Handle in accordance with good industrial hygiene and safety practice. Avoid contact with skin, eyes and clothing.

Protection - fire and explosion:
Take measures to prevent the build up of electrostatic charge. Keep away from sources of ignition - No smoking.

Technical measures/Storage conditions
Keep tightly closed in a dry, cool and well-ventilated place.

Material storage
Keep in a dry, cool place. Protect against light.

Incompatible products
Keep away from: Oxidizing agents

8. Exposure controls / personal protection

OSHA Exposure Limits
No exposure limits established.

ACGIH Exposure Limits
No exposure limits established.

Mexico National Exposure Limits
No exposure limits established

Exposure controls

Engineering measures
General or dilution ventilation is frequently insufficient as the sole means of controlling employee exposure. Local ventilation is usually preferred. Explosion-proof equipment (for example fans, switches, and grounded ducts) should be used in mechanical ventilation systems.

Protective equipment
A safety shower and eyewash should be readily available.
**General advice**
Do not breathe dust. Avoid contact with skin and eyes.

### 9. Physical and chemical properties

**Appearance**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Form</td>
<td>solid</td>
</tr>
<tr>
<td>Color</td>
<td>white</td>
</tr>
<tr>
<td>Odor</td>
<td>odorless</td>
</tr>
<tr>
<td>Flash point</td>
<td>Not applicable</td>
</tr>
<tr>
<td>Autoignition Temperature</td>
<td>178 °C</td>
</tr>
<tr>
<td>Method</td>
<td>A.16 (DI 92/69/EEC)</td>
</tr>
</tbody>
</table>

**Boiling point/range**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Method</td>
<td>OECD 103</td>
</tr>
<tr>
<td>Density</td>
<td>1.36 g/ml @ 20°C</td>
</tr>
<tr>
<td>Method</td>
<td>OECD 109</td>
</tr>
</tbody>
</table>

**pH**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Method</td>
<td>OECD 109</td>
</tr>
</tbody>
</table>

**Vapor pressure**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Method</td>
<td>OECD 109</td>
</tr>
</tbody>
</table>

**Water solubility**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Method</td>
<td>OECD 109</td>
</tr>
</tbody>
</table>

**Solubility in other solvents**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Method</td>
<td>OECD 109</td>
</tr>
</tbody>
</table>

**Partition coefficient**

<table>
<thead>
<tr>
<th>Property</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Method</td>
<td>OECD 109</td>
</tr>
</tbody>
</table>

### 10. Stability and reactivity

**Reactivity**

Stable under normal conditions of handling, use and transportation.

**Conditions to avoid**

Avoid dust formation.

**Incompatible Materials**

Keep away from:

- Oxidizing agents

**Hazardous Combustion or Decomposition Products:**

Thermal decomposition products may include oxides of carbon.

**Possibility of hazardous reactions**

No hazards to be especially mentioned.
11. Toxicological information

Potential health effects

Routes of exposure
Skin, eyes, inhalation.

Immediate effects

<table>
<thead>
<tr>
<th>Route</th>
<th>Effect</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skin</td>
<td>Essentially non-irritating.</td>
</tr>
<tr>
<td>Eyes</td>
<td>Causes eye irritation.</td>
</tr>
<tr>
<td>Inhalation</td>
<td>No adverse health effects have been observed.</td>
</tr>
</tbody>
</table>

Potassium (E,E)-hexa-2,4-dienoate

Acute oral toxicity
- LD50: > 10000 mg/kg, rat (Reference substance: Sorbic acid)

Acute dermal toxicity
- LD50: > 2000 mg/kg, rat (Reference substance: Sorbic acid)

Acute inhalation toxicity
- LC50 (4h): > 5.15 mg/l
  - Method: OECD 403

Skin corrosion/irritation
- Not irritating
  - Species: rabbit
  - Method: OECD 404

Skin Sensitization
- Nonsensitizer
  - Species: guinea pig
  - Method: Similar to: EEC 96/54, B.6

Serious eye damage/eye irritation
- Irritant
  - Species: rabbit eye
  - Method: OECD 405

Carcinogenic effects
- No evidence of carcinogenicity (Reference substance: Sorbic acid)
  - Species: mice
  - Study: 80-weeks long term study
  - NOAEL: 1400 mg/kg/d

in vitro Mutagenicity

in vivo Mutagenicity
- Mammalian Erythrocyte Micronucleus Test in mice: negative - Method: OECD 474 (Reference substance: Sorbic acid)

Reproductive toxicity
- No toxicity to reproduction (Reference substance: Sorbic acid)
  - Routes of exposure: oral gavage


12. Ecological Information

Potassium (E,E)-hexa-2,4-dienoate

**Acute fish toxicity**

Species: Oncorhynchus mykiss (rainbow trout)
Method: OECD 203
LC50: > 1000 mg/l (96h)

**Acute daphnia toxicity**

Species: Daphnia magna
Method: OECD 202
EC50: 982 mg/l (48h)

**Toxicity to bacteria**

Species: in activated sludge
Method: OECD 209
EC50 (3h): > 100 mg/l
(Reference substance: Sorbic acid)

**Biodegradation**

Method: OECD 301 D
Readily biodegradable
(Reference substance: Sorbic acid)

**Other potential hazards**

The substance does not meet the criteria for PBT / vPvB according to REACH, Annex XIII

13. Disposal considerations

Dispose of spilled material in accordance with state and local regulations for waste that is non-hazardous by Federal definition. Note that this information applies to the material as manufactured; processing, use, or contamination may make this information inappropriate, inaccurate, or incomplete.
14. Transport information

US Department of Transportation  Not regulated
TDG  Not regulated
Mexico Transport Information  Not regulated
ICAO/IATA  Not restricted
IMDG  Not regulated

15. Regulatory Information

US State Regulations
Chemicals associated with the product which are subject to the state right-to-know regulations are listed along with the applicable state(s):
none

U.S. FEDERAL REGULATIONS
TSCA Inventory:
We certify that all components are either on the TSCA inventory or qualify for an exemption.
Potassium sorbate is regulated by the Food, Drug and Cosmetics Act, GRAS status (21CFR 182.3640)

Environmental Regulations:

SARA 311:
  Acute health:  Yes
  Chronic health:  No
  Fire:  No
  Sudden release of pressure:  No
  Reactive:  No

INTERNATIONAL REGULATIONS
Safety Data Sheet

Product Name: Nutrinova® Potassium Sorbate Powder
MSDS number: 81044
Revision Number: 1.01
Revision Date: May.24.2018
Issuing date: Apr.11.2019

International Inventories
Australia (AICS)
Canada (DSL)
China (IECSC)
Europe (EINECS)
Japan (ENCS)
Japan (ISHL)
Korea (KECI)
New Zealand (NZIoC)
Philippines (PICCS)
United States (TSCA)

16. Other information

NFPA: Health: 2 Flammability: 0 Instability: 0
HMIS: Health: 2 Flammability: 0 Physical Hazard: 0

Food / Feed Safety Emergency Contact: 24 h Food / Feed Safety Emergency No:
(Please contact only in emergency situations) +49 (0)69 305 6418

Prepared By
Product Stewardship Department
Celanese

Sources of key data used to compile the datasheet
Information contained in this safety data sheet is based on Celanese owned data and public sources deemed valid or acceptable. The absence of data elements required by ANSI or 1907/2006/EC indicates that no data meeting these requirements is available.

Other Information:
Observe national and local legal requirements
Changes against the previous version are marked by ***

Abbreviation and Acronym:
ADR = Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
CAS = Chemical Abstracts Service (division of the American Chemical Society)
CLP = Classification, Labelling and Packaging
DNEL = Derived No Effect Level
EINECS = European Inventory of Existing Commercial Chemical Substances
GHS = Globally Harmonized System of Classification and Labelling of Chemicals
IATA = International Air Transport Association
ICAO = International Civil Aviation Organization
IMDG = International Maritime Code for Dangerous Goods
LC50 = Lethal Concentration
LD50 = Lethal Dose
PBT = Persistent, Bioaccumulative and Toxic
PNEC = Predicted No Effect Concentration
RID = Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)
vPvB = very Persistent and very Bioaccumulative
<table>
<thead>
<tr>
<th>Product Name</th>
<th>Nutrinova® Potassium Sorbate Powder</th>
<th>NAGH/EN</th>
</tr>
</thead>
<tbody>
<tr>
<td>MSDS number</td>
<td>81044</td>
<td></td>
</tr>
<tr>
<td>Revision Number</td>
<td>1.01</td>
<td></td>
</tr>
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