



## Material Safety Data Sheet acc. to Regulation (EC) No 1907/2006

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### 1. IDENTIFICATION OF THE SUBSTANCE / PREPARATION AND OF THE COMPANY / UNDERTAKING:

#### Information on Product:

**Product Name:** Pectin (E 440)

**Product Use:** For food and feed applications.  
For pharmaceutical, cosmetic and industrial applications.

#### Information on Manufacturer / Supplier:

**Company:** IPPA – International Pectin Producers Association  
Turnstrasse 37  
75305 Neuenbürg  
Germany

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### 2. HAZARDS IDENTIFICATION:

Pectin products are not classified as a dangerous substances or preparations according to Directives 1999/45/EC, 67/548/EEC and Regulation (EC) 1272/2008.

Combustible dust.

Ensure appropriate electrical classification and avoidance of ignition sources in dusty environments.

Handle in a manner consistent with good industrial hygiene practices – avoid creating or inhaling aerosols of this or any other material.

#### Most Important Hazards:

**Slip Hazard:** Slip hazard when spilled material becomes wet.

**Eyes:** Dry powder may cause foreign body irritation in some individuals.

**Skin:** Prolonged contact with the dry powder may cause drying or chapping.

**Inhalation:** Reported to cause respiratory sensitization in susceptible individuals after prolonged use.  
Hygroscopic properties of the gum can form a paste or gel in the airway.  
Inhalation of dust may cause respiratory tract irritation.  
Excessive inhalation of dust may cause coughing and sneezing.

**Ingestion:** Not toxic if swallowed (less than a mouthful) based on available information.  
Oral ingestion of large amounts reported to cause change in cholesterol levels in some human subjects.

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### 3. COMPOSITION / INFORMATION ON INGREDIENTS:

**Composition:** Pectin (may be standardised with sugars or buffer salts).

**CAS-Number:** 9000-69-5

**EINECS-Number:** 0232-553-0

**REACH Registration Number:** Pectins are natural polymers or chemically modified natural polymers and as such exempt from REACH registration.

Pectin does not meet the classification criteria but certain general advice and precautions are recommended when using the product.

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#### 4. FIRST-AID MEASURES:

<b>General Advice:</b>	Remove material from eyes, skin and clothing. In case of doubt or when symptoms persist, seek medical attention. Wash heavily contaminated clothing before reuse.
<b>Inhalation:</b>	Move to fresh air. If symptoms persist, call a physician.
<b>Skin Contact:</b>	Wash off with water and soap if necessary.
<b>Eye Contact:</b>	Hold eyelids apart and flush eyes immediately with a steady, gentle stream of water for several minutes. If eye irritation persists, seek medical attention.
<b>Ingestion:</b>	No significant adverse health effects are expected to develop if small amounts (less than a mouthful) are swallowed.

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#### 5. FIRE-FIGHTING MEASURES:

<b>General Advice:</b>	Product will burn when in contact with a flame. Self extinguishes when ignition source is removed. Tends to smoulder.
<b>Suitable Extinguishing Media:</b>	Water, dry powder, carbon dioxide.
<b>Hazardous Combustion Products:</b>	Carbon dioxide Carbon monoxide
<b>Specific Hazards:</b>	Can contain sufficient fines to cause a combustible dust explosion. Do not breathe smoke, gases or vapours generated.
<b>Special Protective Equipment:</b>	In the event of fire, wear self-contained breathing apparatus.

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#### 6. ACCIDENTAL RELEASE MEASURES:

<b>Personal Precautions:</b>	Wet material on floors may be slippery. Avoid dust formation. In case of exposure to high levels of airborne dust, wear a personal respirator in compliance with national legislation.
<b>Methods for Cleaning up:</b>	Use vacuum equipment designed specifically for combustible dust. Take precautionary measures against static discharges. Disposal information – Refer to Section 13.

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#### 7. HANDLING AND STORAGE:

<b>Handling:</b>	Avoid dust formation. In case of insufficient ventilation, wear suitable respiratory equipment.
<b>Storage:</b>	Store cool and dry in a roofed well ventilated area in the unopened original package. Avoid excessive light.

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#### 8. EXPOSURE CONTROLS / PERSONAL PROTECTION:

<b>Engineering Controls</b>	Ventilation: Provide natural or mechanical ventilation to control exposure levels below airborne exposure limits in this section. The use of local mechanical exhaust ventilation is preferred at sources of air contamination such as open process equipment.
<b>Personal Protective Equipment:</b>	
<b>Respiratory Protection:</b>	If handling generates dust levels which cause irritation, or results in personal exposure exceeding the Occupational Exposure Standard (OES) of 10 mg M-3 (8 h TWA reference period) for total inhalable dust, then suitable approved dust respirator should be used. Personal exposure to dust should ideally be controlled to the lowest level possible below the OES.

<b>Eye Protection:</b>	This product does not cause significant eye irritation or eye toxicity requiring special protection. Where there is significant potential for eye contact, wear chemical goggles and have eye flushing equipment available.
<b>Hand Protection:</b>	Gloves are recommended if extended exposure is anticipated.
<b>Skin and Body Protection:</b>	Although this product does not present a significant skin concern, minimize skin contamination by following good industrial practice.

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#### 9. PHYSICAL AND CHEMICAL PROPERTIES:

<b>Appearance:</b>	White or light beige powder.
<b>Odour:</b>	None.
<b>Solubility:</b>	Soluble in hot water.
<b>Flash point:</b>	Not applicable.
<b>Explosivity:</b>	By ignition of a dust cloud pectins can cause a dust explosion ( $K_{St} < 200 \text{ bar.m/s}$ ).

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#### 10. STABILITY AND REACTIVITY:

<b>Stability:</b>	Stable under recommended storage conditions.
<b>Conditions to Avoid:</b>	Avoid dust formation.
<b>Materials to Avoid:</b>	Strong oxidizing agents.
<b>Hazardous Decomposition Products:</b>	Thermal decomposition products: carbon monoxide, carbon dioxide.

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#### 11. TOXICOLOGICAL INFORMATION:

<b>General:</b>	The dry powder may cause foreign body irritation in some individuals. Prolonged contact with the dry powder may cause drying or chapping of the skin. Excessive inhalation of dust may be annoying and can mechanically impede respiration. Due to the hygroscopic properties, they can form a paste or gel in the airway.
<b>Acute Toxicity:</b>	LD 50 oral (rat): > 5000 mg/kg
<b>Chronic Effects:</b>	28 day studies do not show any adverse effects.
<b>Carcinogenicity:</b>	Not listed as a carcinogen by NTP. Not regulated as a carcinogen by OSHA. Not evaluated by IARC.
<b>Mutagenicity / Genotoxicity:</b>	Not a mutagen in in vitro tests.
<b>Reported Human Effects:</b>	Reported to cause respiratory sensitization in susceptible individuals after prolonged use. Due to the physical nature of this material, may cause eye, skin and respiratory irritation.

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#### 12. ECOLOGICAL INFORMATION:

<b>General:</b>	Pectins are believed not to be dangerous to the environment with respect to mobility, persistency and degradability, bio accumulative potential, aquatic toxicity and other data relating to ecotoxicity.
<b>Persistence / Degradability:</b>	Biodegradable.
<b>Bioaccumulative Potential:</b>	Inherently biodegradable.
<b>96-Hour LC50:</b>	Rainbow trout: 300 mg/L.

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#### 13. DISPOSAL CONSIDERATIONS:

<b>Substance:</b>	Dispose in accordance with local, state and national regulations.
<b>Used Packaging:</b>	Dispose in accordance with local, state and national regulations.

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#### **14. TRANSPORT INFORMATION:**

Pectins are not considered dangerous according to international transportation regulations (ADR, IMCO/IMDG, ICAO/IATA).

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#### **15. REGULATORY INFORMATION:**

There is no obligation for labelling according to Directives 1999/45/EC, 67/548/EEC and Regulation (EC) 1272/2008.

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#### **16. OTHER INFORMATION:**

**Reason for Version:**

Revised Section(s):

**Disclaimer:**

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