

# MATERIAL SAFETY DATA SHEET OF POTATO STARCH

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Valid from: 01.09.2021

#### 1. PRODUCT IDENTIFICATION, MANUFACTURER:

Trade name: Potato Starch "Superior Standard"

Producer: Zakłady Przemysłu Ziemniaczanego w Pile "ZETPEZET" Sp. z o. o.

Młodych 30 Street 64-920 Piła, Poland Tel/fax: (067) 212-27-48

## 2. COMPOSITION, INFORMATION ABOUT INGREDIENTS:

Potato starch is obtained by the wet method from the potato tuber.

Hazardous components: does not contain

#### 3. IDENTIFICATION OF HAZARDS

Based on available data and product literature potato starch is not classified as hazardous. This information is consistent with current standards and legislation.

No health hazard occurs when the product is used according to specifications and application.

#### 4. FIRST AID

General tips: does not require special protective measures

Skin contact: wash with water

Eyes contact: flush eyes with plenty of water

Inhalation: avoid excessive dust Intake: rinse mouth with water

# 5. PROCEEDING IN CASE OF FIRE

Fire prevention: non-flammable: non-flammable product, explosive dusts
Suitable extinguishing media: water, fire-extinguishing powder, fire foam

Unsuitable extinguishing media: does not occur Special hazards: explosive dusts

## 6. PROCEEDING IN CASE OF UNINTENDED RELEASE INTO THE ENVIRONMENT:

The product does not present any hazards.

Any hazardous substances are not released.

Collect the spilled product into packaging and containers.

Personal protection: work clothing

## 7. PRODUCT TREATMENT AND STORAGE

Product treatment: Does not require special protective measures.

Proceeding according with general rules, Health and Safety

Practice plus avoid excessive dust.

Storage: Product should be kept in clean, dry and airy store.

Packaging: Paper valve bags with folic filler.

# 8. EXPOSURE CONTROL AND PERSONAL PROTECTION

The product does not contain any substances which concentration should be monitored in the workplace. During the handling of the product, standard protective clothing should be used and a dust mask in case of dust formation.



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#### 9. PHYSICO - CHEMICAL MEASUREMENTS

Appearance: loose powder

Colour in system CIE,L: not less than 93 (white)

Smell: typical for potato starch, free from foreign odour

Moisture: not more than 20 %

pH value of water solution: 5,5-7,5

Solubility in water: insoluble in cold water

Bulk density: 700 g/dm³
Starch density: 1,65 g/cm³
Heat of combustion: 17,5, MJ/kg
Temperature of smoldering: 210 °C

Flash point: not determined, because at about 280°C, its volume increases several

times in relation to the original and undergoes charring to form a glassy

surface layer

Important for the degree of fire hazard is the explosiveness of dust in the potato starch mixture with air. Lower explosive limit is 60 g/m³, with a minimum amount of oxygen in the air about 15 %. Ignition temperature of dust sprayed from the hot surface is about 430 °C. Risk of dust starch ignition occurs:

- from incandescent body at concentration 7,0 g/m<sup>3</sup>
- from electric arc at concentration 10,3 g/m<sup>3</sup>
- from electrical or mechanical spark at concentration 13,7 g/m<sup>3</sup>

# 10. STABILITY AND REACTIVITY

Stability: stable under normal conditions

Conditions to be avoided: humidity Materials to be avoided: absence

Hazardous decomposition products:absence

#### 11. TOXICOLOGICAL INFORMATION

Toxicity: Potato starch is not a dangerous chemical and is

not classified as a hazardous substance

Eye contact: neutral Skin contact: neutral

Consumption: lack of data, used in the food industry and households

Poisoning by inhalation: neutral, in case of excessive dust may irritate the respiratory system

Mutagenic activity: not classified as mutagenic Carcinogenic activity: not classified as carcinogenic

Effect on fertility: not classified as toxic on reproduction

Chronic effects: lack of data
Acute toxicity: not toxic

# 12. ECOLOGICAL INFORMATION

Mobility: insoluble in water, migrates through the air as dust

Decomposition: the product is biodegradable

#### 13. WASTE MANAGMENT

Safety (manipulation of waste): recover if possible

Methods of waste disposal: lack of waste, paper bags for recycling



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#### 14. TRANSPORT INFORMATION

Classification: potato starch can be transported by various means of transports, such as:

railway, automobile, inland-aquatic and marine

Should be transported in accordance with applicable regulations of the freight. Each mode of transport should be provided with a bill of lading containing the data:

- recipient's address
- product name
- weight
- · number of packages

#### 15. REGULATORY INFORMATION

Classification and labeling: marking individual packages

Individual packages should contain at least the following data:

- designation of the product according to the standard unit
- name and address of the producer
- net weight
- production date
- expiry date

General safety regulations should be respected.

# 16. ADDITIONAL INFORMATION

Potato starch is extracted from crushed to a pulp cells of potato tubers from which the starch is washed with water. Eluted from starch pulp is subjected to a purification process, dehydration, drying and sifting. Commercial product contains up to 20 % water.