1 Identification

· Product identifier
  · Trade name: Concanavalin A
  · Article number: 150710
  · CAS Number:
    11028-71-0
  · EC number:
    234-258-2
  · Molecular Formula N/A
  · Application of the substance / the mixture For Research Use Only

· Details of the supplier of the safety data sheet
  · Manufacturer/Supplier:
    MP Biomedicals, LLC
    29525 Fountain Parkway
    Solon, OH 44139
    United States
    www.mpbio.com
  · Information department: Quality Control Department
  · Emergency telephone number: CHEMTREC: 1-800-424-9300 (1-703-527-3887)

2 Hazard(s) identification

· Classification of the substance or mixture
  · GHS08 Health hazard
    Resp. Sens. 1  H334  May cause allergy or asthma symptoms or breathing difficulties if inhaled.
    Repr. 2  H361  Suspected of damaging fertility or the unborn child.

· Label elements
  · GHS label elements The substance is classified and labeled according to the Globally Harmonized System (GHS).
  · Hazard pictograms

· Signal word Danger

· Hazard-determining components of labeling:
  Concanavalin A

· Hazard statements
  May cause allergy or asthma symptoms or breathing difficulties if inhaled.
  May cause an allergic skin reaction.
  Suspected of damaging fertility or the unborn child.

· Precautionary statements
  [In case of inadequate ventilation] wear respiratory protection.
**Trade name:** Concanavalin A

Avoid breathing dust/fume/gas/mist/vapors/spray
Wear protective gloves/protective clothing/eye protection/face protection.
Contaminated work clothing must not be allowed out of the workplace.
Obtain special instructions before use.
Do not handle until all safety precautions have been read and understood.
Specific treatment (see on this label).
If experiencing respiratory symptoms: Call a POISON CENTER/doctor.
Wash contaminated clothing before reuse.
If inhaled: If breathing is difficult, remove person to fresh air and keep comfortable for breathing.
If exposed or concerned: Get medical advice/attention.
If skin irritation or rash occurs: Get medical advice/attention.
IF ON SKIN: Wash with plenty of water.
Store locked up.
Dispose of contents/container in accordance with local/regional/national/international regulations.

- **Classification system:**
  - **NFPA ratings (scale 0 - 4)**
    - Health = 2
    - Fire = 0
    - Reactivity = 0
  - **HMIS-ratings (scale 0 - 4)**
    - HEALTH
      - Health = *2
    - FIRE
      - Fire = 0
    - REACTIVITY
      - Reactivity = 0

- **Other hazards**
  - Results of PBT and vPvB assessment
    - PBT: Not applicable.
    - vPvB: Not applicable.

### 3 Composition/information on ingredients

- **Chemical characterization:** Substances
- **CAS No.** Description
  - 11028-71-0 Concanavalin A
- **Identification number(s)**
- **EC number:** 234-258-2

### 4 First-aid measures

- **Description of first aid measures**
- **After inhalation:**
  - Supply fresh air and to be sure call for a doctor.
  - If breathed in, supply fresh air. If not breathing, give artificial respiration. Consult a Doctor.
- **After skin contact:** Wash off with soap and plenty of water. Consult a Doctor.
- **After eye contact:** Flush eyes with running water as a precaution.
- **After swallowing:** If symptoms persist consult doctor.
- **Information for doctor**
  - Most important symptoms and effects, both acute and delayed No further relevant information available.
5 Fire-fighting measures

- Extinguishing media
  - Suitable extinguishing agents: Use fire fighting measures that suit the environment.
  - Special hazards arising from the substance or mixture: No further relevant information available.
- Advice for firefighters
  - Protective equipment: No special measures required.

6 Accidental release measures

- Personal precautions, protective equipment and emergency procedures
  - Use personal protective equipment. Avoid dust formation. Avoid breathing vapours, mist or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Avoid breathing dust.
  - For personal protection see section 8.
- Environmental precautions:
  - Do not allow to enter sewers/surface or ground water.
- Methods and material for containment and cleaning up:
  - Pick up mechanically, dispose contaminated material as waste according to Section 13.
- Reference to other sections
  - See Section 7 for information on safe handling.
  - See Section 8 for information on personal protection equipment.
  - See Section 13 for disposal information.
- Protective Action Criteria for Chemicals
  - PAC-1: Substance is not listed.
  - PAC-2: Substance is not listed.
  - PAC-3: Substance is not listed.

7 Handling and storage

- Handling:
  - Precautions for safe handling
    - Ensure good ventilation/exhaustion at the workplace. Avoid direct contact with skin and eyes.
    - Open and handle receptacle with care.
  - Information about protection against explosions and fires: Keep respiratory protective device available.
- Conditions for safe storage, including any incompatibilities
  - Storage: -20 °C
  - Requirements to be met by storerooms and receptacles: No special requirements.
  - Further information about storage conditions:
  - Specific end use(s) No further relevant information available.
8 Exposure controls/personal protection

- Additional information about design of technical systems: No further data; see Section 7.
- Control parameters
- Components with limit values that require monitoring at the workplace: Not required.
- Additional information: The lists that were valid during the creation were used as basis.
- Exposure controls
- Personal protective equipment:
  - General protective and hygienic measures:
    Keep away from foodstuffs, beverages and feed.
    Immediately remove all soiled and contaminated clothing.
    Wash hands before breaks and at the end of work.
    Store protective clothing separately.
  - Breathing equipment:
    In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use respiratory protective device that is independent of circulating air.
- Protection of hands:

  Protective gloves

  The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.
  Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.
  Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation
- Material of gloves
  The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.
- Penetration time of glove material
  The exact breakthrough time has to be found out by the manufacturer of the protective gloves and has to be observed.
- Eye protection: Not required.

9 Physical and chemical properties

- Information on basic physical and chemical properties
- General Information
  - Appearance:
    Form: Powder
    Color: White
  - Odor: Indeterminate
  - Odor threshold: Not determined.
  - pH-value: Not applicable.
- Change in condition
  - Boiling point/Boiling range: Undetermined.
  - Flash point: Not applicable.
- Flammability (solid, gaseous): Product is not flammable.
Trade name: Concanavalin A

10 Stability and reactivity

- Reactivity: No further relevant information available.
- Chemical stability
  - Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
  - Possibility of hazardous reactions: No dangerous reactions known.
  - Conditions to avoid: No further relevant information available.
  - Incompatible materials: No further relevant information available.
  - Hazardous decomposition products: No dangerous decomposition products known.

11 Toxicological information

- Information on toxicological effects
- Acute toxicity:
- Primary irritant effect:
  - on the skin: No irritant effect.
  - on the eye: Irritant and potentially harmful
- Sensitization:
  Sensitization possible through inhalation.
  Sensitization possible through skin contact.
12 Ecological information

- Toxicity
  - Aquatic toxicity: No further relevant information available.
  - Persistence and degradability: No further relevant information available.
- Behavior in environmental systems:
  - Bioaccumulative potential: No further relevant information available.
  - Mobility in soil: No further relevant information available.
- Additional ecological information:
  - General notes:
    Water hazard class 1 (Self-assessment): slightly hazardous for water
    Do not allow undiluted product or large quantities of it to reach ground water, water course or sewage system.
  - Results of PBT and vPvB assessment
    - PBT: Not applicable.
    - vPvB: Not applicable.
  - Other adverse effects: No further relevant information available.

13 Disposal considerations

- Waste treatment methods
  - Recommendation:
    Can not be disposed together with household garbage. Do not allow product to reach sewage system.
- Uncleaned packagings:
  - Recommendation: Discard must be made according to official regulations.
  - Recommended cleansing agent: Water, if necessary with cleaning agents.

14 Transport information

- UN-Number
  - DOT, ADR, IMDG, IATA: Not regulated
- UN proper shipping name
  - DOT, ADR, IMDG, IATA: Not regulated
- Transport hazard class(es)
  - DOT, ADR, IMDG, IATA: Not regulated
### 15 Regulatory information

- **Safety, health and environmental regulations/legislation specific for the substance or mixture**
  - **Sara**
    - **Section 355 (extremely hazardous substances):**
      - Substance is not listed.
    - **Section 313 (Specific toxic chemical listings):**
      - Substance is not listed.
    - **TSCA (Toxic Substances Control Act):**
      - Substance is not listed.
    - **Proposition 65**
      - **Chemicals known to cause cancer:**
        - Substance is not listed.
      - **Chemicals known to cause reproductive toxicity for females:**
        - Substance is not listed.
      - **Chemicals known to cause reproductive toxicity for males:**
        - Substance is not listed.
      - **Chemicals known to cause developmental toxicity:**
        - Substance is not listed.

- **Carcinogenic categories**
  - **EPA (Environmental Protection Agency)**
    - Substance is not listed.
  - **TLV (Threshold Limit Value established by ACGIH)**
    - Substance is not listed.
  - **NIOSH-Ca (National Institute for Occupational Safety and Health)**
    - Substance is not listed.
  - **GHS label elements** The substance is classified and labeled according to the Globally Harmonized System (GHS).
  - **Hazard pictograms**

  ![GHS08]
  
  **Signal word** Danger

(Contd. on page 8)
Trade name: Concanavalin A

- Hazard-determining components of labeling:
  Concanavalin A
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  Suspected of damaging fertility or the unborn child.
- Precautionary statements
  [In case of inadequate ventilation] wear respiratory protection.
  Avoid breathing dust/fume/gas/mist/vapors/spray.
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  Obtain special instructions before use.
  Do not handle until all safety precautions have been read and understood.
  Specific treatment (see on this label).
  If experiencing respiratory symptoms: Call a POISON CENTER/doctor.
  Wash contaminated clothing before reuse.
  If inhaled: If breathing is difficult, remove person to fresh air and keep comfortable for breathing.
  IF exposed or concerned: Get medical advice/attention.
  If skin irritation or rash occurs: Get medical advice/attention.
  IF ON SKIN: Wash with plenty of water.
  Store locked up.
  Dispose of contents/container in accordance with local/regional/national/international regulations.
- Chemical safety assessment:
  A Chemical Safety Assessment has not been carried out.

16 Other information
This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- Department issuing SDS: Quality Control Dept.
- Date of preparation / last revision 05/11/2017 / -
- Abbreviations and acronyms:
  ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
  IMDG: International Maritime Code for Dangerous Goods
  DOT: US Department of Transportation
  IATA: International Air Transport Association
  ACGIH: American Conference of Governmental Industrial Hygienists
  EINECS: European Inventory of Existing Commercial Chemical Substances
  CAS: Chemical Abstracts Service (division of the American Chemical Society)
  NFPA: National Fire Protection Association (USA)
  HMIS: Hazardous Materials Identification System (USA)
  VOC: Volatile Organic Compounds (USA, EU)
  PBT: Persistent, Bioaccumulative and Toxic
  vPvB: very Persistent and very Bioaccumulative
  NIOSH: National Institute for Occupational Safety
  OSHA: Occupational Safety & Health
  TLV: Threshold Limit Value
  PEL: Permissible Exposure Limit
  REL: Recommended Exposure Limit
  Resp. Sens. 1: Respiratory sensitisation – Category 1
  Skin Sens. 1: Skin sensitisation – Category 1
  Repr. 2: Reproductive toxicity – Category 2

US