# SAFETY DATA SHEET



Broad Dextran, Part Number PL2080-0000

# **SECTION 1: Identification of the substance/mixture and of the company/** undertaking

1.1 Product identifier

**Product name** : Broad Dextran, Part Number PL2080-0000

**EC** number : 232-677-5 **CAS** number : 9004-54-0 Part no. : PL2080-0000

1.2 Relevant identified uses of the substance or mixture and uses advised against

**Material uses** : Reagents and Standards for Analytical Chemistry Laboratory Use

Container type: Bottle

Quantity: 1 g

1.3 Details of the supplier of the safety data sheet

Agilent Technologies Manufacturing GmbH & Co. KG

Hewlett-Packard-Str. 8 76337 Waldbronn

Germany 0800 603 1000

e-mail address of person : pdl-msds author@agilent.com

responsible for this SDS

1.4 Emergency telephone number

**Emergency telephone** 

number (with hours of

operation)

: CHEMTREC®: +(44)-870-8200418

## **SECTION 2: Hazards identification**

#### 2.1 Classification of the substance or mixture

**Product definition** : Mono-constituent substance

Classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

Not classified.

See Section 16 for the full text of the H statements declared above.

See Section 11 for more detailed information on health effects and symptoms.

2.2 Label elements

Signal word : No signal word.

: No known significant effects or critical hazards. **Hazard statements** 

**Precautionary statements** 

**Prevention** : Not applicable. : Not applicable. Response **Storage** : Not applicable. : Not applicable. **Disposal** Supplemental label : Not applicable.

Date of issue/Date of

elements

: 26/10/2018 1/11

Broad Dextran, Part Number PL2080-0000

## **SECTION 2: Hazards identification**

Annex XVII - Restrictions : Not applicable.

on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

Special packaging requirements

**Tactile warning of** 

danger

: Not applicable.

2.3 Other hazards

Substance meets the

criteria for PBT

according to Regulation (EC) No. 1907/2006,

**Annex XIII** 

Substance meets the

criteria for vPvB

according to Regulation (EC) No. 1907/2006,

**Annex XIII** 

Other hazards which do

not result in classification

: Not available.

: Not available.

: May form explosible dust-air mixture if dispersed.

# **SECTION 3: Composition/information on ingredients**

3.1 Substances : Mono-constituent substance

| Product/ingredient name | Identifiers                     | %   | Regulation (EC) No. 1272/2008<br>[CLP]                               | Type |
|-------------------------|---------------------------------|-----|--|------|
| <b>D</b> extran         | EC: 232-677-5<br>CAS: 9004-54-0 | 100 | Not classified.  | [A]  |
|                         |                                 |     | See Section 16 for the full text of the H statements declared above. |      |

There are no additional ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment and hence require reporting in this section.

#### Type

- [A] Constituent
- [B] Impurity
- [C] Stabilising additive

### **SECTION 4: First aid measures**

#### 4.1 Description of first aid measures

**Eye contact** : Immediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check for and remove any contact lenses. Get medical attention if irritation

occurs.

**Inhalation** : Remove victim to fresh air and keep at rest in a position comfortable for breathing. Get

medical attention if symptoms occur.

**Skin contact**: Flush contaminated skin with plenty of water. Remove contaminated clothing and

shoes. Get medical attention if symptoms occur.

**Ingestion**: Wash out mouth with water. Remove victim to fresh air and keep at rest in a position

comfortable for breathing. If material has been swallowed and the exposed person is conscious, give small quantities of water to drink. Do not induce vomiting unless directed to do so by medical personnel. Get medical attention if symptoms occur.

**Date of issue/Date of** : 26/10/2018 **2/11** 

Broad Dextran, Part Number PL2080-0000

# **SECTION 4: First aid measures**

**Protection of first-aiders** : No action shall be taken involving any personal risk or without suitable training.

### 4.2 Most important symptoms and effects, both acute and delayed

### Potential acute health effects

**Eye contact** : Exposure to airborne concentrations above statutory or recommended exposure limits

may cause irritation of the eyes.

**Inhalation** : Exposure to airborne concentrations above statutory or recommended exposure limits

may cause irritation of the nose, throat and lungs.

Skin contactIngestionNo known significant effects or critical hazards.No known significant effects or critical hazards.

### Over-exposure signs/symptoms

**Eye contact**: Adverse symptoms may include the following:

irritation redness

**Inhalation**: Adverse symptoms may include the following:

respiratory tract irritation

coughing

Skin contact : No specific data.

Ingestion : No specific data.

### 4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician : Treat symptomatically. Contact poison treatment specialist immediately if large

quantities have been ingested or inhaled.

**Specific treatments**: No specific treatment.

# **SECTION 5: Firefighting measures**

### 5.1 Extinguishing media

Suitable extinguishing

media

: Use dry chemical powder.

**Unsuitable extinguishing** 

media

: Avoid high pressure media which could cause the formation of a potentially explosible

dust-air mixture.

### 5.2 Special hazards arising from the substance or mixture

Hazards from the substance or mixture

: May form explosible dust-air mixture if dispersed.

**Hazardous combustion** 

products

: Decomposition products may include the following materials:

carbon dioxide carbon monoxide

### 5.3 Advice for firefighters

Special precautions for fire-fighters

: Promptly isolate the scene by removing all persons from the vicinity of the incident if there is a fire. No action shall be taken involving any personal risk or without suitable training. Move containers from fire area if this can be done without risk. Use water spray to keep fire-exposed containers cool.

Special protective equipment for fire-fighters

: Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full face-piece operated in positive pressure mode. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to European standard EN 469 will provide a basic level of protection for chemical

incidents.

**Date of issue/Date of** : 26/10/2018 **3/11** 

### **SECTION 6: Accidental release measures**

### 6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

: No action shall be taken involving any personal risk or without suitable training. Evacuate surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or walk through spilt material. Shut off all ignition sources. No flares, smoking or flames in hazard area. Avoid breathing dust. Put on appropriate personal protective equipment.

For emergency responders

: If specialised clothing is required to deal with the spillage, take note of any information in Section 8 on suitable and unsuitable materials. See also the information in "For nonemergency personnel".

### 6.2 Environmental precautions

: Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers. Inform the relevant authorities if the product has caused environmental pollution (sewers, waterways, soil or air).

### 6.3 Methods and material for containment and cleaning up

Methods for cleaning up

: Move containers from spill area. Use spark-proof tools and explosion-proof equipment. Vacuum or sweep up material and place in a designated, labelled waste container. Dispose of via a licensed waste disposal contractor.

6.4 Reference to other sections

: See Section 1 for emergency contact information. See Section 8 for information on appropriate personal protective equipment. See Section 13 for additional waste treatment information.

# **SECTION 7: Handling and storage**

#### 7.1 Precautions for safe handling

**Protective measures** 

: Put on appropriate personal protective equipment (see Section 8). Avoid breathing dust. Avoid the creation of dust when handling and avoid all possible sources of ignition (spark or flame). Prevent dust accumulation. Use only with adequate ventilation. Wear appropriate respirator when ventilation is inadequate. Electrical equipment and lighting should be protected to appropriate standards to prevent dust coming into contact with hot surfaces, sparks or other ignition sources. Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by earthing and bonding containers and equipment before transferring material.

## Advice on general occupational hygiene

Eating, drinking and smoking should be prohibited in areas where this material is handled, stored and processed. Workers should wash hands and face before eating, drinking and smoking. Remove contaminated clothing and protective equipment before entering eating areas. See also Section 8 for additional information on hygiene measures.

### 7.2 Conditions for safe storage, including any incompatibilities

**Storage** 

: Store in accordance with local regulations. Store in a segregated and approved area. Store in original container protected from direct sunlight in a dry, cool and well-ventilated area, away from incompatible materials (see Section 10) and food and drink. Eliminate all ignition sources. Separate from oxidizing materials. Keep container tightly closed and sealed until ready for use. Containers that have been opened must be carefully resealed and kept upright to prevent leakage. Do not store in unlabelled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

# 7.3 Specific end use(s)

Recommendations

: Industrial applications, Professional applications.

Industrial sector specific : Not applicable.

solutions

Date of issue/Date of : 26/10/2018 4/11

# **SECTION 8: Exposure controls/personal protection**

### 8.1 Control parameters

#### Occupational exposure limits

No exposure limit value known.

# Recommended monitoring procedures

: If this product contains ingredients with exposure limits, personal, workplace atmosphere or biological monitoring may be required to determine the effectiveness of the ventilation or other control measures and/or the necessity to use respiratory protective equipment. Reference should be made to monitoring standards, such as the following: European Standard EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) European Standard EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) European Standard EN 482 (Workplace atmospheres - General requirements for the performance of procedures for the measurement of chemical agents) Reference to national guidance documents for methods for the determination of hazardous substances will also be required.

#### **DNELs/DMELs**

No DNELs/DMELs available.

#### **PNECs**

No PNECs available

### 8.2 Exposure controls

# Appropriate engineering controls

: Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapour or mist, use process enclosures, local exhaust ventilation or other engineering controls to keep worker exposure to airborne contaminants below any recommended or statutory limits. The engineering controls also need to keep gas, vapour or dust concentrations below any lower explosive limits. Use explosion-proof ventilation equipment.

### **Individual protection measures**

#### **Hygiene measures**

: Wash hands, forearms and face thoroughly after handling chemical products, before eating, smoking and using the lavatory and at the end of the working period.

Appropriate techniques should be used to remove potentially contaminated clothing. Wash contaminated clothing before reusing. Ensure that eyewash stations and safety showers are close to the workstation location.

### **Eye/face protection**

: Safety eyewear complying with an approved standard should be used when a risk assessment indicates this is necessary to avoid exposure to liquid splashes, mists, gases or dusts. If contact is possible, the following protection should be worn, unless the assessment indicates a higher degree of protection: safety glasses with sideshields. If operating conditions cause high dust concentrations to be produced, use dust goggles.

#### **Skin protection**

**Hand protection** 

: Chemical-resistant, impervious gloves complying with an approved standard should be worn at all times when handling chemical products if a risk assessment indicates this is necessary.

### **Body protection**

: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

### Other skin protection

: Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product.

#### **Respiratory protection**

: Based on the hazard and potential for exposure, select a respirator that meets the appropriate standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use.

**Date of issue/Date of** : 26/10/2018 **5/11** 

# **SECTION 8: Exposure controls/personal protection**

**Environmental exposure** controls

: Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation. In some cases, fume scrubbers, filters or engineering modifications to the process equipment will be necessary to reduce emissions to acceptable levels.

# **SECTION 9: Physical and chemical properties**

### 9.1 Information on basic physical and chemical properties

**Appearance** 

**Physical state** : Solid. [Crystalline powder.]

Colour : White.

**Odour** Not available. : Not available. **Odour threshold** pН : Not available. Melting point/freezing point : Not available. Initial boiling point and : Not available.

boiling range

Flash point [Product does not sustain combustion.]

**Evaporation rate** : Not available. : Not available. Flammability (solid, gas)

Upper/lower flammability or

explosive limits

: Not available.

: Not available. Vapour pressure : Not available. Vapour density **Relative density** : Not available.

Easily soluble in the following materials: cold water and hot water. Solubility(ies)

Partition coefficient: n-

octanol/water

: Not available.

**Auto-ignition temperature** : Not available. **Decomposition temperature** : Not available. **Viscosity**  Not available. **Explosive properties** : Not available. **Oxidising properties** : Not available.

#### 9.2 Other information

No additional information.

# SECTION 10: Stability and reactivity

: No specific test data related to reactivity available for this product or its ingredients. 10.1 Reactivity

10.2 Chemical stability : The product is stable.

10.3 Possibility of hazardous reactions : Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 Conditions to avoid : Avoid the creation of dust when handling and avoid all possible sources of ignition

(spark or flame). Take precautionary measures against electrostatic discharges. To avoid fire or explosion, dissipate static electricity during transfer by earthing and bonding containers and equipment before transferring material. Prevent dust accumulation.

Date of issue/Date of : 26/10/2018 6/11

Broad Dextran, Part Number PL2080-0000

# **SECTION 10: Stability and reactivity**

10.5 Incompatible

materials

: Reactive or incompatible with the following materials:

oxidizing materials

10.6 Hazardous

decomposition products

: Under normal conditions of storage and use, hazardous decomposition products should

not be produced.

# **SECTION 11: Toxicological information**

#### 11.1 Information on toxicological effects

### **Acute toxicity**

Not available.

### **Irritation/Corrosion**

**Conclusion/Summary** 

: Not available.

**Sensitiser** 

Conclusion/Summary

: Not available.

**Mutagenicity** 

**Conclusion/Summary** 

: Not available.

**Carcinogenicity** 

**Conclusion/Summary** 

: Not available.

**Reproductive toxicity** 

**Conclusion/Summary** 

: Not available.

**Teratogenicity** 

Conclusion/Summary : Not available.

Specific target organ toxicity (single exposure)

Not available.

### Specific target organ toxicity (repeated exposure)

Not available.

### **Aspiration hazard**

Not available.

Information on likely routes of exposure

: Not available.

### Potential acute health effects

Inhalation : Exposure to airborne concentrations above statutory or recommended exposure limits

may cause irritation of the nose, throat and lungs.

Ingestion : No known significant effects or critical hazards.Skin contact : No known significant effects or critical hazards.

**Eye contact**: Exposure to airborne concentrations above statutory or recommended exposure limits

may cause irritation of the eyes.

#### Symptoms related to the physical, chemical and toxicological characteristics

**Inhalation** : Adverse symptoms may include the following:

respiratory tract irritation

coughing

Ingestion : No specific data.

Skin contact : No specific data.

**Eye contact**: Adverse symptoms may include the following:

irritation redness

### Delayed and immediate effects as well as chronic effects from short and long-term exposure

**Short term exposure** 

**Date of issue/Date of** : 26/10/2018 **7/11** 

Broad Dextran, Part Number PL2080-0000

# **SECTION 11: Toxicological information**

Potential immediate

effects

: Not available.

**Potential delayed** 

effects

: Not available.

Long term exposure

Potential immediate

effects

: Not available.

**Potential delayed** 

effects

: Not available.

### Potential chronic health effects

**General** : Repeated or prolonged inhalation of dust may lead to chronic respiratory irritation.

Carcinogenicity : No known significant effects or critical hazards. Mutagenicity : No known significant effects or critical hazards. **Teratogenicity** : No known significant effects or critical hazards. **Developmental effects** : No known significant effects or critical hazards. **Fertility effects** : No known significant effects or critical hazards.

## **SECTION 12: Ecological information**

#### 12.1 Toxicity

**Conclusion/Summary** : Not available.

#### 12.2 Persistence and degradability

Not available.

## 12.3 Bioaccumulative potential

Not available.

12.4 Mobility in soil

Soil/water partition coefficient (Koc)

Not available.

: Not available. **Mobility** 

#### 12.5 Results of PBT and vPvB assessment

**PBT** 

P: Not available. B: Not available. T: Not available.

**vPvB** : Not available.

vP: Not available, vB: Not available,

**12.6 Other adverse effects**: No known significant effects or critical hazards.

# **SECTION 13: Disposal considerations**

### 13.1 Waste treatment methods

#### **Product**

**Methods of disposal** : The generation of waste should be avoided or minimised wherever possible. Disposal

of this product, solutions and any by-products should at all times comply with the requirements of environmental protection and waste disposal legislation and any regional local authority requirements. Dispose of surplus and non-recyclable products via a licensed waste disposal contractor. Waste should not be disposed of untreated to the sewer unless fully compliant with the requirements of all authorities with jurisdiction.

Date of issue/Date of : 26/10/2018 8/11

Broad Dextran, Part Number PL2080-0000

# **SECTION 13: Disposal considerations**

**Hazardous waste** 

: Within the present knowledge of the supplier, this product is not regarded as hazardous waste, as defined by EU Directive 2008/98/EC.

**Packaging** 

**Methods of disposal** 

: The generation of waste should be avoided or minimised wherever possible. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible.

**Special precautions** 

: This material and its container must be disposed of in a safe way. Empty containers or liners may retain some product residues. Avoid dispersal of spilt material and runoff and contact with soil, waterways, drains and sewers.

# **SECTION 14: Transport information**

ADR/RID / IMDG / IATA

: Not regulated.

14.6 Special precautions

for user

: **Transport within user's premises**: always transport in closed containers that are upright and secure. Ensure that persons transporting the product know what to do in the event of an accident or spillage.

14.7 Transport in bulk according to Annex II of Marpol and the IBC Code

: Not available.

# **SECTION 15: Regulatory information**

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

EU Regulation (EC) No. 1907/2006 (REACH)

**Annex XIV - List of substances subject to authorisation** 

**Annex XIV** 

None of the components are listed.

Substances of very high concern

None of the components are listed.

Annex XVII - Restrictions : Not applicable.

on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

**Other EU regulations** 

Ozone depleting substances (1005/2009/EU)

Not listed.

Prior Informed Consent (PIC) (649/2012/EU)

Not listed.

**Seveso Directive** 

This product is not controlled under the Seveso Directive.

International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals

Not listed.

Montreal Protocol (Annexes A, B, C, E)

Not listed.

**Stockholm Convention on Persistent Organic Pollutants** 

Not listed.

Date of issue/Date of : 26/10/2018 9/11

# **SECTION 15: Regulatory information**

**Rotterdam Convention on Prior Informed Consent (PIC)** 

Not listed.

#### **UNECE Aarhus Protocol on POPs and Heavy Metals**

Not listed.

**Inventory list** 

Australia : This material is listed or exempted.

Canada : This material is listed or exempted.

China : This material is listed or exempted.

Europe : This material is listed or exempted.

Japan : Japan inventory (ENCS): This material is listed or exempted.

**Japan inventory (ISHL)**: This material is listed or exempted.

Malaysia: This material is listed or exempted.New Zealand: This material is listed or exempted.Philippines: This material is listed or exempted.Republic of Korea: This material is listed or exempted.Taiwan: This material is listed or exempted.

Thailand : Not determined.

Turkey : This material is listed or exempted.
United States : This material is listed or exempted.

Viet Nam : Not determined.

15.2 Chemical safety

assessment

: This product contains substances for which Chemical Safety Assessments might

still be required.

## **SECTION 16: Other information**

Indicates information that has changed from previously issued version.

**Abbreviations and** 

: ATE = Acute Toxicity Estimate

acronyms

CLP = Classification, Labelling and Packaging Regulation [Regulation (EC) No.

1272/2008]

DNEL = Derived No Effect Level

EUH statement = CLP-specific Hazard statement PNEC = Predicted No Effect Concentration RRN = REACH Registration Number

### Procedure used to derive the classification according to Regulation (EC) No. 1272/2008 [CLP/GHS]

| Classification  | Justification |  |
|-----------------|---------------|--|
| Not classified. |               |  |

### Full text of abbreviated H statements

Not applicable.

### Full text of classifications [CLP/GHS]

Not applicable.

Date of issue/ Date of

: 26/10/2018

revision

Date of previous issue : 17/02/2017

Version : 2

**Notice to reader** 

Date of issue/Date of : 26/10/2018 10/11

Broad Dextran, Part Number PL2080-0000

# **SECTION 16: Other information**

Disclaimer: The information contained in this document is based on Agilent's state of knowledge at the time of preparation. No warranty as to its accurateness, completeness or suitability for a particular purpose is expressed or implied.

**Date of issue/Date of** : 26/10/2018 **11/11**