

SAFETY DATA SHEET

United States

Section 1. Identification Product name

Sephadex™ LH-20, 25 g

Catalogue Number

17009010

Chemical name Other means of identification Product type Sephadex Bead-formed crosslinked Dextran Powder.

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

Identified uses

Laboratory chemicals Liquid chromatography.

Scientific research and development

Industrial applications: Analytical chemistry. Liquid chromatography. Manufacture of chemicals. Scientific research and development.

Supplier

Cytiva Amersham Place Little Chalfont Buckinghamshire HP7 9NA United Kingdom +44 0800 515 313 Cytiva USA 100 Results Way Marlborough, MA 01752 1-800-526-3593

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In case of emergency
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INFOTRAC - 24 Hour number: 1-800-535-5053 Outside of the United States, call 24 Hour number: 001-352-323-3500 (Call Collect)

Section 2. Hazards identification

OSHA/HCS status	While this material is not considered hazardous by the OSHA Hazard Communication Standard (29 CFR 1910.1200), this SDS contains valuable information critical to the safe handling and proper use of the product. This SDS should be retained and available for employees and other users of this product.
Classification of the substance or mixture	Not classified.
GHS label elements	
Signal word	No signal word.
Hazard statements	No known significant effects or critical hazards.
Precautionary statements	
Prevention	Not applicable.
Response	Not applicable.
Storage	Not applicable.
Disposal	Not applicable.
Hazards not otherwise classified	None known.



Page: 1/7 Validation date 13 January 2022

Section 3. Composition/information on ingredients

Substance/mixture	Substance		
Chemical name	Sephadex		
Other means of identification	Bead-formed crosslinked Dextran		
CAS number/other identifiers			
CAS number	9004-54-0		
Ingredient name		%	CAS number
Sephadex		100	9004-54-0
Any concentration shown as a rar	ge is to protect confidentiality or is due to bat	tch variation.	

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.

Section 4. First aid measures

Description of necessary 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.

Most important symptoms/effects, acute and delayed

most important symptoms/enects, 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 contact	No known significant effects or critical hazards.	
Ingestion	No known significant effects or critical hazards.	
Over-exposure signs/symptom	<u>s</u>	
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.	
Indication of immediate medical attention and special treatment needed, if necessary		
Notes to physician	Treat symptomatically. Contact poison treatment specialist immediately if large quantities have been ingested or inhaled.	
Specific treatments	No specific treatment.	
Protection of first-aiders	No action shall be taken involving any personal risk or without suitable training.	
See toxicological information (Section 11)		

Section 5. Fire-fighting measures

Extinguishing media

Suitable extinguishing media	Use an extinguishing agent suitable for the surrounding fire.
Unsuitable extinguishing media	None known.
Specific hazards arising from the chemical	No specific fire or explosion hazard.
Hazardous thermal decomposition products	No specific data.
Special protective actions 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.

17009010



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.

17009010

Section 6. Accidental release measures

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 spilled material. Avoid breathing dust. Put on appropriate personal protective equipment.	
For emergency responders	If specialized 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 non-emergency personnel".	
Environmental precautions	Avoid dispersal of spilled 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).	
Methods and materials for containment and cleaning up		
Small spill	Move containers from spill area. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor.	
Large spill	Move containers from spill area. Approach release from upwind. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labeled waste container. Avoid creating dusty conditions and prevent wind dispersal. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.	

Section 7. Handling and storage

Precautions for safe handling

Protective measures	Put on appropriate personal protective equipment (see Section 8). Avoid breathing dust.
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.
Conditions for safe storage, including any incompatibilities	Store between the following temperatures: 4 to 30°C (39.2 to 86°F). Store in accordance with local regulations. 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. 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 unlabeled containers. Use appropriate containment to avoid environmental contamination. See Section 10 for incompatible materials before handling or use.

Section 8. Exposure controls/personal protection

Control parameters

control parameters	
<u>Occupational exposure limits</u> Sephadex	-
Appropriate engineering controls	Use only with adequate ventilation. If user operations generate dust, fumes, gas, vapor 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.
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.
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 side-shields. 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.

17009010



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.

Section 9. Physical and chemical properties

<u>Appearance</u>	
Physical state	Solid. [Solid beads.]
Color	White to yellowish.
Odor	Odorless.
Odor threshold	Not available.
рН	Not applicable.
Melting point	Not available.
Boiling point	Not available.
Flash point	[Product does not sustain combustion.]
Burning time	Not available.
Burning rate	Not available.
Evaporation rate	Not applicable.
Flammability (solid, gas)	Not available.
Lower and upper explosive	Not available.
(flammable) limits	
Vapor pressure	Not applicable.
Vapor density	Not available.
Relative density	Not available.
Solubility	Insoluble in the following materials: cold water, hot water, methanol and acetone.
Solubility in water	Not available.
Partition coefficient: n-octanol/	Not available.
water	
Auto-ignition temperature	Not available.
Decomposition temperature	Not available.
SADT	Not available.
Viscosity	Not applicable.
Flow time (ISO 2431)	Not available.

Section 10. Stability and reactivity

Reactivity Chemical stability	No specific test data related to reactivity available for this product or its ingredients. The product is stable.
Possibility of hazardous reactions	Under normal conditions of storage and use, hazardous reactions will not occur.
Conditions to avoid	No specific data.
Incompatible materials	No specific data.
Hazardous decomposition products	Under normal conditions of storage and use, hazardous decomposition products should not be produced.

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity Not available.

Irritation/Corrosion

Not available.

Sensitization Not available.

Mutagenicity Not available.

Carcinogenicity Not available.

Reproductive toxicity Not available.

Teratogenicity Not available.



Page: 4/7 Validation date 13 January 2022

Specific target organ toxicity (single exposure)

Not available. Specific target organ toxicity (repeated exposure) Not available. Aspiration hazard Not available. Information on the likely routes Routes of entry anticipated: Oral, Dermal, Inhalation. of exposure Potential acute health effects Eve 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 contact No known significant effects or critical hazards. Ingestion No known significant effects or critical hazards. Symptoms related to the physical, chemical and toxicological characteristics 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. No specific data. Ingestion Delayed and immediate effects and also chronic effects from short and long term exposure Short term exposure 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 Not available. 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. Numerical measures of toxicity Acute toxicity estimates N/A Section 12. Ecological information

Toxicity Not available.			
Persistence and degradability	Aquatia half life	Dhatalyaia	Biodogradobility
Product/ingredient name Sephadex	Aquatic half-life -	Photolysis -	Biodegradability Readily
Bioaccumulative potential Not available.			
Mobility in soil			
Soil/water partition coefficient (K	Not available.		
Other adverse effects	No known significant effects or critical hazards.		



Section 13. Disposal considerations

Disposal methods The generation of waste should be avoided or minimized 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. Waste packaging should be recycled. Incineration or landfill should only be considered when recycling is not feasible. 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 spilled material and runoff and contact with soil, waterways, drains and sewers.

Section 14. Transport information

Product is not regulated as dangerous goods for transport.

Section 15. Regulatory information

U.S. Federal regulations TSCA 8(a) CDR Exempt/Partial exemption: This material is listed or exempted.

Clean Air Act Section 112(b) Hazardous Air Pollutants (HAPs)	Not listed
Clean Air Act Section 602 Class I Substances	Not listed
Clean Air Act Section 602 Class II Substances	Not listed
DEA List I Chemicals (Precursor Chemicals)	Not listed
DEA List II Chemicals (Essential Chemicals)	Not listed

<u>SARA 302/304</u>

Composition/information on ingred	lients

No products were found.

SARA 311/312

Classification Not applicable.

Composition/information on ingredients

No products were found.

State regulations

Massachusetts	This material is not listed.
New York	This material is not listed.
New Jersey	This material is not listed.
Pennsylvania	This material is not listed.

California Prop. 65

This product does not require a Safe Harbor warning under California Prop. 65.

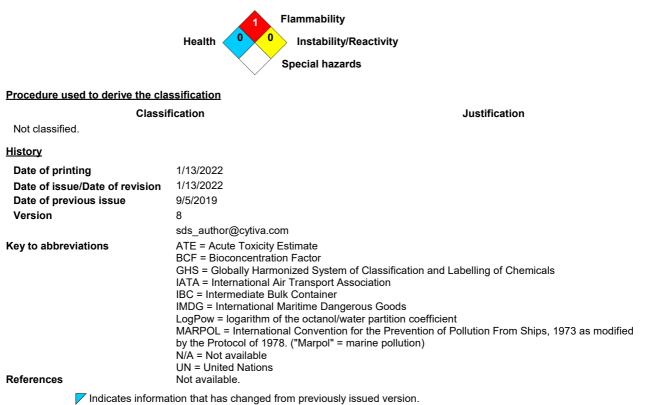
International regulations

Chemical Weapon Convention List Schedules I, II & III Chemicals		
Not listed.		
Montreal Protocol		
Not listed.		
Stockholm Convention on Pers	istent Organic Pollutants	
Not listed.		
Rotterdam Convention on Prior Informed Consent (PIC)		
Not listed.		
UNECE Aarhus Protocol on PO	<u>Ps and Heavy Metals</u>	
Not listed.		
Inventory list		
United States	Not determined.	
Europe	This material is listed or exempted.	
Canada inventory	This material is listed or exempted.	



Section 16. Other information

National Fire Protection Association (U.S.A.)



Notice to reader

To the best of our knowledge, the information contained herein is accurate. However, neither the above-named supplier, nor any of its subsidiaries, assumes any liability whatsoever for the accuracy or completeness of the information contained herein. Final determination of suitability of any material is the sole responsibility of the user. All materials may present unknown hazards and should be used with caution. Although certain hazards are described herein, we cannot guarantee that these are the only hazards that exist.

