

# **SAFETY DATA SHEET**

**United States** 

Section 1. Identification

**Product name** 

HSIF 7200 Agarose, 15 kg

Catalogue Number 97200-3

Chemical name Agarose

Other means of identification Agarose gel beads; Sepharose; (2S,3R,4S,5R,6R)-2-[[(1S,3S,4S,5S,8R)-3-[(2S,3R,4S,5S,6R)-2-[[(1S,3S,4S,5S,8R)-3-[(2S,3R,4S,5S,6R)-3-[(2S,3R,4S,5R,4S,5R)-3-[(2S,3R,4S,5R,4S,5R)-3-[(2S,3R,4S,5R,4S,5R)-3-[(2S,3R,4S,5R,4S,5R)-3-[(2S,3R,4S,5R,4S,5R)-3-[(2S,3R,4S)-3-[(2S,3R,4S)-3-[(2S,3R,4S)-3-[(2S,3R,4S)-3-[(2S,3R,4S)-3-[(2S,3R,4S)-3-[(2S,3R,4S)-3-[(2S,3R,4S)-3-[(2S,3R,4S)-3-[(2S,3R,4S)-3-[(2S,3R,4S)-3-[(2S,3R,4S)-3-[(2S,3R,4S)-3-[(2S,3R,4S)-3-[(2S,3R,4S)-3-[(2S,3R,4S)-3-[(2S,3R,4S)-3-[(2S,3R,4S)-3-[(2S,3R,4S)-2-[(2S,3R,4S)-3-[(2S,3R,4S)-3-[(2S,3R,4S)-2-[(2S,3R,4S)-2-[(2S,3R,4S)-2-[(2S,3R,4S)-2-[(2S,3R,4

(1S,3R,4S,5S,8R)-3,4-dihydroxy-2,6-dioxabicyclo[3.2.1]octan-8-yl]oxy]-3,5-dihydroxy-6-

(hydroxymethyl)oxan-4-yl]oxy-4-hydroxy-2,6-dioxabicyclo[3.2.1]octan-8-yl]oxy]-6-(hydroxymethyl)

Cytiva USA

100 Results Way Marlborough, MA 01752

1-800-526-3593

oxane-3,4,5-triol

Product type Powder.

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

For further manufacturing. Liquid chromatography.

Manufacture of chemical products. Scientific research and development

Consumer use

**Supplier** Cytiva

Amersham Place Little Chalfont Buckinghamshire

HP7 9NA United Kingdom +44 1494 508000

In case of emergency 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** 

PreventionNot applicable.ResponseNot applicable.StorageNot applicable.DisposalNot applicable.Hazards not otherwiseNone known.

classified

Hazards identified when used No known significant effects or critical hazards.

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Version 2

Validation date 10 September 2025

# Section 3. Composition/information on ingredients

Substance/mixtureSubstanceChemical nameAgarose

Other means of identification Agarose gel beads; Sepharose; (2S,3R,4S,5R,6R)-2-[[(1S,3S,4S,5S,8R)-3-[(2S,3R,4S,5S,6R)-2-[[(1S,3S,4S,5S,8R)-3-[(2S,3R,4S,5S,6R)-3-[(2S,3R,4S,5R,4S,5R,4]-3-[(2S,3R,4S,5R,4]-3-[(2S,3R,4S,5R,4]-3-[(2S,3R,4S,5R,4]-3-[(2S,3R,4S,5R,4]-3-[(2S,3R,4S,5R,4]-3-[(2S,3R,4S,5R,4]-3-[(2S,3R,4S,5R,4]-3-[(2S,3R,4S,5R,4]-3-[(2S,3R,4S,5R,4]-3-[(2S,3R,4S,4]-3-[(2S,3R,4S,4]-3-[(2S,3R,4S,4]-3-[(2S,3R,4S,4]-3-[(2S,3R,4S,4]-3-[(2S,3R,4S,4]-3-[(2S,3R,4S,4]-3-[(2S,3R,4S,4]-3-[(2S,3R,4S,4]-3-[(2S,3R,4S,4]-3-[(2S,3R,4S,4]-3-[(2S,3R,4S,4]-3-[(2S,3R,4S,4]-3-[(2S,3R,4S,4]-3-[(2S,3R,4S,4]-3-[(2S,3R,4S,4]-3-[(2S,3R,4S,4]-3-[(2S,3R,4S,4]-3-[(2S,3R,4]-3-[(2S

(1S,3R,4S,5S,8R)-3,4-dihydroxy-2,6-dioxabicyclo[3.2.1]octan-8-yl]oxy]-3,5-dihydroxy-6-(hydroxymethyl)oxan-4-yl]oxy-4-hydroxy-2,6-dioxabicyclo[3.2.1]octan-8-yl]oxy]-6-(hydroxymethyl)

Identifiers

CAS: 9012-36-6

oxane-3,4,5-triol

Ingredient name Synonyms %

Agarose gel beads; Sepharose; (2S, 100

3R,4S,5R,6R)-2-[[(1S,3S,4S,5S,8R) -3-[(2S,3R,4S,5S,6R)-2-[[(1S,3R,4S, 5S,8R)-3,4-dihydroxy-2,6-dioxabicyclo [3.2.1]octan-8-yl]oxy]-3,5-dihydroxy-6-(hydroxymethyl)oxan-4-yl]oxy-4-hydroxy-2,6-dioxabicyclo[3.2.1] octan-8-yl]oxy]-6-(hydroxymethyl)

oxane-3,4,5-triol

Any concentration shown as a range is to protect confidentiality or is due to batch variation.

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

Occupational exposure limits, if available, are listed in Section 8.

### 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.

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

attention if symptoms occur. **Skin contact**Skin contact

Attention if symptoms occur.

Remove contaminated clothing and shoes. Get

medical attention if symptoms occur.

Ingestion Wash out mouth with water. 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

# Potential acute health effects

Inhalation

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 contactNo known significant effects or critical hazards.IngestionNo 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 contactNo specific data.IngestionNo 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

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

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.

### 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.

### Section 7. Handling and storage

#### Precautions for safe handling

Protective measures P

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**

Occupational exposure limits

Ingredient name Exposure limits
Agarose None

#### **Biological exposure indices**

No exposure indices known.

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.

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Individual protection measures

Wash hands, forearms and face thoroughly after handling chemical products, before eating, Hygiene measures

> 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. Recommended: safety glasses with side-shields.

**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. > 8 hours

(breakthrough time): nitrile rubber

Personal protective equipment for the body should be selected based on the task being performed **Body protection** 

and the risks involved and should be approved by a specialist before handling this product.

Recommended: No special recommendations.

Appropriate footwear and any additional skin protection measures should be selected based on the Other skin protection

task being performed and the risks involved and should be approved by a specialist before handling

this product. Recommended: No special recommendations.

Based on the hazard and potential for exposure, select a respirator that meets the appropriate Respiratory protection

> standard or certification. Respirators must be used according to a respiratory protection program to ensure proper fitting, training, and other important aspects of use. Recommended: Wear

appropriate respiratory protection.

Personal protective equipment (Pictograms)



# Section 9. Physical and chemical properties

**Appearance** 

Physical state Solid. [Powder.]

Color White. Odorless Odor threshold Not available. pН Not applicable.

Melting point/freezing point 60 to 90°C (140 to 194°F)

Boiling point or initial boiling

point and boiling range

Decomposes

Flash point [Product does not sustain combustion.]

**Burning time** Not available. **Burning rate** Not available. **Evaporation rate** Not available. **Flammability** Not available. Lower and upper explosive Not applicable.

(flammable) limits

Vapor pressure Not available Relative vapor density Not applicable. Relative density Not available. 1.49 g/cm<sup>3</sup> Density

Solubility(ies)

Media Result cold water Partially soluble

hot water Soluble

Solubility in water Partition coefficient: n-octanol/

Not available. Not available

**Auto-ignition temperature** Not applicable. **Decomposition temperature** Not available. SADT Not available.

Viscosity Dynamic (room temperature): Not available.

Kinematic (room temperature): Not available. Kinematic (40°C (104°F)): Not available.

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Flow time (ISO 2431) Not available.

Particle characteristics

Median particle size Not available.

# Section 10. Stability and reactivity

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

**Chemical stability** 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 Under normal conditions of storage and use, hazardous decomposition products should not be products

produced.

# Section 11. Toxicological information

#### Information on toxicological effects

### **Acute toxicity**

Not available.

Conclusion/Summary

[Product]

Not available.

### Skin corrosion/irritation

Not available.

Conclusion/Summary

[Product]

Not available.

### Serious eye damage/eye irritation

Not available.

Conclusion/Summary

[Product]

Not available.

### Respiratory corrosion/irritation

Not available.

Conclusion/Summary

[Product]

Not available.

# Respiratory or skin sensitization

Not available.

Skin

Conclusion/Summary

[Product]

Not available.

Respiratory

Conclusion/Summary

[Product]

Not available.

# Germ cell mutagenicity

Not available.

Conclusion/Summary

[Product]

Not available.

### Carcinogenicity

Not available.

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Conclusion/Summary

[Product]

Not available.

### Reproductive toxicity

Not available.

Conclusion/Summary

[Product]

Not available.

### 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

of exposure

Routes of entry anticipated: Oral, Dermal, Inhalation, Eyes.

#### 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 contactNo known significant effects or critical hazards.IngestionNo 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 contactNo specific data.IngestionNo specific data.

### 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.

Conclusion/Summary

[Product]

Not available.

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

CarcinogenicityNo known significant effects or critical hazards.MutagenicityNo known significant effects or critical hazards.Reproductive toxicityNo known significant effects or critical hazards.

# **Numerical measures of toxicity**

### **Acute toxicity estimates**

N/A

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# Section 12. Ecological information

#### **Toxicity**

Not available.

Conclusion/Summary

[Product]

Not available.

### Persistence and degradability

Not available.

#### **Bioaccumulative potential**

Not available

**Mobility in soil** 

Soil/Water partition coefficient

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

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

Not listed

### TSCA 12(b) - Chemical export notification

Not applicable.

Clean Air Act Section 112(b) Hazardous Air Pollutants

HAPs)

Clean Air Act Section 602 Class I Substances
Clean Air Act Section 602 Class II Substances
DEA List I Chemicals (Precursor Chemicals)
Not listed
DEA List II Chemicals (Essential Chemicals)
Not listed

#### SARA 302/304

# Composition/information on ingredients

No products were found.

SARA 304 RQ Not applicable.

**SARA 311/312** 

Classification Not applicable.

#### Composition/information on ingredients

No products were found.

### State regulations

MassachusettsThis material is not listed.New YorkThis material is not listed.New JerseyThis material is not listed.PennsylvaniaThis material is not listed.

California Prop. 65

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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 Persistent Organic Pollutants

Not listed

# Rotterdam Convention on Prior Informed Consent (PIC)

Not listed

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

Not listed

### **Inventory list**

United States This material is active or exempted.

Canada inventory This material is listed or exempted.

# Section 16. Other information

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



### Procedure used to derive the classification

Classification Justification

Not classified.

### **History**

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 Version
 2

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**Key to abbreviations** ATE = Acute Toxicity Estimate

BCF = Bioconcentration Factor

GHS = Globally Harmonized System of Classification and Labelling of Chemicals

IATA = International Air Transport Association

IBC = Intermediate Bulk Container

IMDG = International Maritime Dangerous Goods

LogPow = logarithm of the octanol/water partition coefficient

MARPOL = International Convention for the Prevention of Pollution From Ships, 1973 as modified

by the Protocol of 1978. ("Marpol" = marine pollution)

N/A = Not available UN = United Nations

References Not available.

Indicates information that has changed from previously issued version.

#### 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.

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