

Safety Data Sheet

日本

1. Product and company identification

Product name HyClone™ AdvanceSTEM (TM) ES Qualified L-

Glutamine 200mM Solution

Catalogue Number SH30852

Product type Liquid.

Original preparation date 9/14/2015

Date of issue/Date of revision 9/26/2025

Date of previous issue 9/14/2015

 $\underline{\text{Relevant identified uses of the substance or mixture and uses advised against}}$

For Further Manufacturing or Research Use. Not for Diagnostic or Therapeutic Use.

Supplier / Manufacturer

Cytiva Austria HyClone Laboratories
Kremplstr. 5 925 West 1800 South
4061 Pasching Logan, Utah 84321
AUSTRIA Phone: (435) 792-8000

Tel. (+43) 7229 64865 Fax (+43) 7229 64866

グローバルライフサイエンステクノロジーズジャパン株式会社

新宿区百人町三丁目25番1号

サンケンビルヂング東京都

東京都 169-0073 日本

+81-(0)3-5331-9336

Cytiva Singapore

1 Maritime Square #13-01 Harbourfront Centre Singapore 099253

2. Hazards identification

GHS Classification Not classified.

Percentage of the mixture consisting of ingredient(s) of unknown hazards to the aquatic environment:

2.9%

GHS label elements

Signal word No signal word.

Hazard statements No known significant effects or critical hazards.

Precautionary statements

General

Prevention Not applicable.

Response Not applicable.

Storage Not applicable.

Disposal Not applicable.

Other hazards which do not result in classification

None known.

Article Number SH30852 Page: 1/8

Validation date 26 September 2025

3. Composition/information on ingredients

Substance/mixture Mixture

4. First aid measures

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

attention if symptoms occur. In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed person may need to be kept under medical surveillance for 48 hours.

Skin contact Flush contaminated skin with plenty of water. Remove contaminated clothing and shoes. Get

medical attention if symptoms occur.

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.

Wash out mouth with water. If material has been swallowed and the exposed person is conscious, Ingestion 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 No known significant effects or critical hazards. Skin contact No known significant effects or critical hazards. Eye contact No known significant effects or critical hazards. Ingestion No known significant effects or critical hazards.

Short term exposure

Potential delayed effects Not available.

Over-exposure signs/symptoms

Inhalation No specific data. Skin contact No specific data. Eye contact No specific data. Ingestion No specific data.

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

Notes to physician In case of inhalation of decomposition products in a fire, symptoms may be delayed. The exposed

person may need to be kept under medical surveillance for 48 hours.

5. Fire-fighting measures

Suitable extinguishing media Use an extinguishing agent suitable for the surrounding fire.

Unsuitable extinguishing media None known

Specific hazards arising from

the chemical

In a fire or if heated, a pressure increase will occur and the container may burst.

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.

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. Put on appropriate personal protective equipment.

If specialized clothing is required to deal with the spillage, take note of any information in Section 8 For emergency responders

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 Stop leak if without risk. Move containers from spill area. Absorb with an inert material and place in

an appropriate waste disposal container. Dispose of via a licensed waste disposal contractor.

Article Number SH30852 Page: 2/8

Validation date 26 September 2025

Large spill

Stop leak if without risk. Move containers from spill area. Prevent entry into sewers, water courses, basements or confined areas. Wash spillages into an effluent treatment plant or proceed as follows. Dispose of via a licensed waste disposal contractor. Contain and collect spillage with noncombustible, absorbent material e.g. sand, earth, vermiculite or diatomaceous earth and place in container for disposal according to local regulations.

7. Handling and storage

<u>Handling</u>

Protective measures Put on appropriate personal protective equipment (see Section 8).

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.

Storage

Conditions for safe storage

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.

Exposure controls/personal protection

Appropriate engineering controls

Occupational exposure limits

Biological exposure indices

No exposure indices known.

Individual protection measures

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

Good general ventilation should be sufficient to control worker exposure to airborne contaminants.

ensure proper fitting, training, and other important aspects of use.

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

Eye 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

Skin 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.

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.

Physical and chemical properties

The conditions of measurement of all properties are at standard temperature and pressure unless otherwise indicated.

Physical state Color Not available Odor Not available **Odor threshold** Not available. pН Not available. Melting point/freezing point Not available. Boiling point or initial boiling Not available.

point and boiling range

Flash point Not available.

Evaporation rate Not available. Flammability Not available. Not available

Lower and upper explosive

(flammable) limits Vapor pressure

Not available

Ingredient name

Vapor pressure at 50°C Vapor Pressure at 20°C

mm Hg

Article Number SH30852 Page: 3/8

Method

mm Hg

kPa

kPa

Method

water 17.5 2.3

glutamic acid <0.000011 <0.0000015 OECD 104

Relative vapor density

Relative density

Solubility in water

Partition coefficient: n-octanol/

Not available.

Not available.

Not applicable.

water

Auto-ignition temperature Not available.

 Decomposition temperature
 Not available.

 Viscosity
 Dynamic (room temperature): Not available.

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

Particle characteristics

Median particle sizeNot applicable.SADTNot available.

Viscosity Dynamic (room temperature): Not available.

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

Flow time (ISO 2431)

Burning rate

Burning time

Not available.

Not applicable.

Not applicable.

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

products

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

produced.

11. Toxicological information

Acute toxicity

Not available.

Acute toxicity estimates

N/A

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.

Article Number SH30852 Page: 4/8

Validation date 26 September 2025

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.

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.

12. Ecological information

Toxicity

Not available.

Conclusion/Summary [Product] Not available.

Persistence/degradability

Not available.

Conclusion/Summary [Product] Not available.

Bioaccumulative potential

Not available.

Mobility in soil

 Soil/Water partition coefficient
 Not available.

 Mobility
 Not available.

 Hazardous to the ozone layer
 Not applicable.

<u>Other adverse effects</u> No known significant effects or critical hazards.

Article Number SH30852 Page: 5/8

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.

14. Transport information

IMDG IATA **UN** number Not available. Not available. Not available.

Not available Not available. **UN proper shipping** Not available.

Transport hazard class Not available. Not available. Not available. (es)

Packing group

Additional information -

Special precautions for user Transport within user's premises: always transport in closed containers that are upright and

Nο

secure. Ensure that persons transporting the product know what to do in the event of an accident or

Nο

spillage

Transport in bulk according to **IMO** instruments

Environmental hazards No.

Not available.

15. Regulatory information

Fire Service Law

None of the components are listed.

Fire Service Law - Obstructive Not listed

Industrial Safety and Health Act

Not applicable.

Ordinance on the Prevention of the Hazard due to Specified Chemical Substances

None of the components are listed

Organic solvents poisoning Not applicable. prevention

Substance(s) requiring labelling

Chemicals requiring notification

Chemical substances that cause skin disorders, etc. and other chemical substances that must be handled with impermeable protective equipment etc. based on special chemical regulations. (Article 594-2 Paragraph 1 of Ordinance on ISH)

None of the components are listed.

Carcinogens based on Article 577-2 of the Ordinance on ISH

None of the components are listed.

None of the components are listed.

Corrosive liquid Not listed

> Article Number SH30852 Page: 6/8

ISHL Enforcement Order Appendix 1 - Dangerous

Substances

Harmful Substances Subject

to Obtaining Permission for

Manufacturing

Not listed

Not available

Harmful Substances. Not listed

Prohibited for Manufacturing

Chemical Substances Control Law (CSCL)

None of the components are listed.

Poisonous and Deleterious Substances

None of the components are listed.

Pollutant Release and Transfer Registers (PRTR)

None of the components are listed.

JSOH Carcinogen Law concerning prevention of

pollution of the ocean

Not listed Not available

Not available.

Not listed

Road law List of Specially Controlled

Industrial Waste

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.

International lists

National inventory

Japan inventory (CSCL): All components are listed or exempted. Japan

Japan inventory (ISHL): Not determined.

United States All components are active or exempted. Canada inventory All components are listed or exempted. China All components are listed or exempted.

16. Other information

Date of printing 9/26/2025 Date of issue/Date of revision 9/26/2025 Date of previous issue 9/14/2015 Version

sds_author@cytiva.com

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

Article Number SH30852 Page: 7/8 UN = United Nations

Procedure used to derive the classification

Classification Justification

Not classified.

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.

Article Number SH30852 Page: 8/8