

SAFETY DATA SHEET

Conforms to Regulation (EC) No. 1907/2006 (REACH), Annex II, as amended by UK REACH Regulation SI 2019/758 SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1 Product identifier

HyClone™ AdvanceSTEM (TM) ES Qualified L-

Glutamine 200mM Solution

Catalogue Number SH30852

Other means of identification Not available.

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

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

1.3 Details of the supplier of the safety data sheet

Supplier Cytiva Austria

Cytiva Austria Kremplstr. 5 4061 Pasching AUSTRIA

Phone: +43 7229 64865

HyClone Laboratories 925 West 1800 South Logan, Utah 84321 Phone; (435) 792-8000

Cytiva Singapore 1 Maritime Square #13-01 Harbourfront Centre Singapore 099253

Person who prepared the SDS: sds_author@cytiva.com

United Kingdom (UK) Cytiva Austria

Kremplstr. 5 4061 Pasching AUSTRIA

Phone: +43 7229 64865

1.4 Emergency telephone number

Call INFOTRAC 24 Hour number: 001-352-323-3500 (Call Collect).

Hours of operation

Mo. - Fr.

08.30 - 17.00

National advisory body/Poison Centre

United Kingdom (UK) National Poison Information Centre

Medical Toxicology Unit Avalonley Road London SE14 5ER Tel.: +44 (171)635 91 91

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

Product definition

Mixture

Classification according to UK CLP/GHS

Not classified.

The product is not classified as hazardous according to UK CLP Regulation SI 2019/720 as amended.

Ingredients of unknown toxicity 2.9 percent of the mixture consists of component(s) of unknown acute dermal toxicity

2.9 percent of the mixture consists of component(s) of unknown acute inhalation toxicity

7

Ingredients of unknown

ecotoxicity

Contains 2.9% of components with unknown hazards to the aquatic environment

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

Hazard pictograms

Signal word
No signal word.

Precautionary statements

General Not applicable.

Prevention Not applicable.

Response Not applicable.

Storage Not applicable.

Disposal Not applicable.

Supplemental label elements Not applicable.

Annex XVII - Restrictions on the Mot applicable. manufacture, placing on the market and use of certain dangerous substances,

Special packaging requirements

Containers to be fitted with child-resistant fastenings

mixtures and articles

Not applicable.

Tactile warning of danger Not applicable.

2.3 Other hazards

Product meets the criteria for PBT or vPvB according to Regulation (EC) No. 1907/2006, Annex XIII

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

Other hazards which do not result in classification

None known.

SECTION 3: Composition/information on ingredients

3.2 Mixtures Mixture

There are no ingredients present which, within the current knowledge of the supplier and in the concentrations applicable, are classified as hazardous to health or the environment, are PBTs, vPvBs or Substances of equivalent concern, or have been assigned a workplace exposure limit and hence require reporting in this section.

Article Number SH30852 Page: 2/10

SECTION 4: First aid measures

4.1 Description of first aid measures

mmediately flush eyes with plenty of water, occasionally lifting the upper and lower eyelids. Check Eye contact

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. 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

7

hours

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. 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.

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

Over-exposure signs/symptoms

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

4.3 Indication of any immediate medical attention and special treatment needed

Notes to physician n 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.

Specific treatments No specific treatment.

SECTION 5: Firefighting measures

5.1 Extinguishing media

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

Unsuitable extinguishing media None known.

5.2 Special hazards arising from the substance or mixture

Hazards from the substance or f a fire or if heated, a pressure increase will occur and the container may burst.

mixture

Hazardous combustion

products

Decomposition products may include the following materials:

carbon dioxide carbon monoxide nitrogen oxides

5.3 Advice for firefighters

Special precautions for fire-

fighters

Fromptly 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. Clothing for fire-fighters (including helmets, protective boots and gloves) conforming to British standard BS EN 469 will provide a basic level of protection for chemical incidents.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

No action shall be taken involving any personal risk or without suitable training. Evacuate For non-emergency personnel

surrounding areas. Keep unnecessary and unprotected personnel from entering. Do not touch or

walk through spilt material. Put on appropriate personal protective equipment.

For emergency responders ₭ 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 non-emergency personnel".

6.2 Environmental precautions

Kvoid 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

Article Number 5H30852 Page: 3/10

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.

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.

6.4 Reference to other

sections

Large spill

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

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

7.1 Precautions for safe handling

Protective measures

Fut on appropriate personal protective equipment (see Section 8).

hygiene

Advice on general occupational 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

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 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 sector specific solutions

Not available. Not available

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limits

No exposure limit value known.

Biological exposure indices

No exposure indices known.

Recommended monitoring procedures

Reference should be made to monitoring standards, such as the following: British Standard BS EN 689 (Workplace atmospheres - Guidance for the assessment of exposure by inhalation to chemical agents for comparison with limit values and measurement strategy) British Standard BS EN 14042 (Workplace atmospheres - Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents) British Standard BS 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

Not available.

PNECs

Not available.

8.2 Exposure controls

Appropriate engineering controls

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

Individual protection measures

Hygiene measures

 $\overline{\mathbb{W}}$ ash 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.

Article Number 5H30852 Page: 4/10

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. 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. Fersonal 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. 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. 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. Emissions from ventilation or work process equipment should be checked to ensure they comply **Environmental exposure** controls 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

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

9.1 Information on basic physical and chemical properties

Αp	ре	ar	ar	ıce
----	----	----	----	-----

Physical state Liquid. Colour Not available. Not available. Odour Not available. **Odour threshold** Not available. Not available. Melting point/freezing point Initial boiling point and boiling Not available. range Flammability (solid, gas) Not available.

Upper/lower flammability or Not available. explosive limits

Not available. Flash point Not available. **Auto-ignition temperature** Not available. **Decomposition temperature**

Viscosity ☑ynamic (room temperature): Not available.

Kinematic (room temperature): Not available.

Kinematic (40°C): Not available.

Solubility in water Not available. Partition coefficient: n-octanol/ Not applicable water

Not available Vapour pressure

> Vapour Pressure at 20°C Vapour pressure at 50°C Ingredient name mm Hg kPa Method mm Hg kPa Method

Water 23 17.5

< 0.000011 < 0.0000015 OECD 104 glutamic acid

Not available. **Evaporation rate** Not available Relative density Not available. Vapour density Not available. **Explosive properties** Not available. **Oxidising properties**

Particle characteristics

Median particle size Not applicable.

> Page: 5/10

9.2 Other information

Not available.

Burning time Not applicable.

Burning rate Not applicable.

Solubility in water Not available.

SECTION 10: Stability and reactivity

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

10.2 Chemical stability The product is stable.

10.3 Possibility of hazardous

reactions

 $\overline{\mathbb{V}}$ nder normal conditions of storage and use, hazardous reactions will not occur.

10.4 Conditions to avoid
10.5 Incompatible materials
No specific data.
No specific data.

10.6 Hazardous vo specific data.

10.6 Hazardous vo specific data.

10.6 Hazardous vo specific data.

decomposition products produced.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Acute toxicity

Not available.

Conclusion/Summary [Product] 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.

Skin

Conclusion/Summary [Product] Not available.

Respiratory

Conclusion/Summary [Product] Not available.

Germ cell mutagenicity

Not available.

Conclusion/Summary [Product] Not available.

Article Number SH30852 Page: 6/10

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.

Information on likely routes of

Routes of entry anticipated: Oral, Dermal, Eyes.

exposure

Potential acute health effects

InhalationNo known significant effects or critical hazards.IngestionNo known significant effects or critical hazards.Skin contactNo known significant effects or critical hazards.Eye contactNo known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

InhalationNo specific data.IngestionNo specific data.Skin contactNo specific data.Eye contactNo specific data.

Delayed and immediate effects as well as 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]

Mot available.

 General
 No known significant effects or critical hazards.

 Carcinogenicity
 No known significant effects or critical hazards.

 Mutagenicity
 No known significant effects or critical hazards.

 Reproductive toxicity
 No known significant effects or critical hazards.

Other information Not available.

Article Number SH30852 Page: 7/10

SECTION 12: Ecological information

12.1 Toxicity

Not available.

Conclusion/Summary [Product] Not available.

12.2 Persistence and degradability

Not available.

Conclusion/Summary [Product] Not available.

12.3 Bioaccumulative potential

Not available.

12.4 Mobility in soil

Soil/water partition coefficient
Not available.

Mobility Not available.

12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be a PBT or a vPvB.

SECTION 13: Disposal considerations

The information in this section contains generic advice and guidance. The list of Identified Uses in Section 1 should be consulted for any available use-specific information provided in the Exposure Scenario(s).

13.1 Waste treatment methods

Product

<u>- 100000</u>	
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.
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.
<u>Packaging</u>	
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	his 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	ADN	IMDG	IATA
14.1 UN number	Not available.	Not available.	Not available.	Not available.
14.2 UN proper shipping name	Not available.	Not available.	Not available.	Not available.
14.3 Transport hazard class(es)	Ñot available.	Ñot available.	Ñot available.	Not available.
14.4 Packing group				7
14.5 Environmental hazards	₩o.	N o.	N o.	N o.

Article Number SH30852 Page: 8/10

MyClone™ AdvanceSTE	M (TM) ES Qualified L-Gluta	mine 200mM Solution	SH30852
Additional			
information			

14.6 Special precautions

for user

₹ransport 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 IMO instruments

Not available.

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture UK (GB)/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.

Ozone depleting substances

Not listed.

Prior Informed Consent (PIC)

Not listed.

Persistent Organic Pollutants

Not listed.

Annex XVII - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles

No listed substance

Seveso Directive

This product is not controlled under the Seveso Directive.

EU regulations

Industrial emissions Not listed (integrated pollution prevention and control) - Air

Industrial emissions (integrated pollution prevention and control) -Water

Not listed

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 KII components are active or exempted. Canada inventory All components are listed or exempted. China All components are listed or exempted.

> Page: 9/10

SH30852

Japan

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

Japan inventory (ISHL): Not determined.

15.2 Chemical safety assessment

This product contains substances for which Chemical Safety Assessments are still required.

SECTION 16: Other information

indicates information

Indicates information that has changed from previously issued version.

Abbreviations and acronyms A

ATE = Acute Toxicity Estimate

GB CLP = UK CLP (EC No 1272/2008) on the Classification, Labelling and Packaging of Substances and Mixtures as amended by (EU Exit) Regulations 2019 No. 720 and amendments

DMEL = Derived Minimal Effect Level
DNEL = Derived No Effect Level

EUH statement = GB CLP-specific Hazard statement

N/A = Not available

PBT = Persistent, Bioaccumulative and Toxic PNEC = Predicted No Effect Concentration RRN = REACH Registration Number

SGG = Segregation Group

vPvB = Very Persistent and Very Bioaccumulative

Procedure used to derive the classification

Classification	Justification
Not classified.	

Full text of abbreviated H

statements

Not applicable.

Full text of classifications Not applicable.

Date of printing26 September 2025Date of issue/ Date of revision26 September 2025Date of previous issue14 September 2015

Version 2

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: 10/10