

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier:

D/E Neutralizing Broth D04-115

1.2 Relevant identified uses of the substance or mixture and uses advised against: Relevant uses: Culture medium. For professional use only.

Uses advised against: All uses not specified in this section or in section 7.3

1.3 Details of the supplier of the safety data sheet:

Alpha Biosciences, Inc. 3651 Clipper Mill Road 21211 Baltimore - Maryland - USA Phone.: 410.467.9983 -Fax: 410.467.5088 www.alphabiosciences.com

1.4 Emergency telephone number:

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture:

CLP Regulation (EC) nº 1272/2008:

Classification of this product has been carried out in accordance with CLP Regulation (EC) nº 1272/2008.

Acute Tox. 4: Acute toxicity, Category 4, H302+H312 Skin Sens. 1: Sensitisation, skin, Category 1, H317

2.2 Label elements:

CLP Regulation (EC) nº 1272/2008:

Warning



Hazard statements:

Acute Tox. 4: H302+H312 - Harmful if swallowed or in contact with skin Skin Sens. 1: H317 - May cause an allergic skin reaction

Precautionary statements:

P101: If medical advice is needed, have product container or label at hand

P102: Keep out of reach of children

P261: Avoid breathing dust/fume/gas/mist/vapours/spray

P272: Contaminated work clothing should not be allowed out of the workplace

P280: Wear protective gloves/protective clothing/eye protection/face protection

P302+P352: IF ON SKIN: Wash with plenty of water

P333+P313: If skin irritation or rash occurs: Get medical advice/attention

P501: Dispose of the contents/containers in accordance with the current legislation on waste treatment

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Supplementary information:

EUH031: Contact with acids liberates toxic gas

Substances that contribute to the classification

Sodium hydrogensulphite ; Sodium mercaptoacetate

2.3 Other hazards:

Non-applicable

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substance:

Non-applicable

3.2 Mixture:



SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS (continue)

Chemical description: Mixture of substances

Components:

In accordance with Annex II of Regulation (EC) nº1907/2006 (point 3), the product contains:

	Identification	Chemical name/Classification		
EC: 231-548-0		Sodium hydrogensul	odium hydrogensulphite ATP CLP00	
			Acute Tox. 4: H302 - Warning	
CAS: 367-51-1		Sodium mercaptoace	tate Self-classified	
	206-696-4 Non-applicable : 01-2119968564-24-XXXX		Acute Tox. 3: H301; Acute Tox. 4: H312; Met. Corr. 1: H290; Skin Sens. 1: H317 - Danger	2 - <10 %
REACH	: 01-2119968564-24-XXXX	5	Acute Tox. 5: nool; Acute Tox. 4: nool; Met. Coll. 1: nool; Skill Sells. 1: nool; - Daliger	

To obtain more information on the risk of the substances consult sections 8, 11, 12, 15 and 16.

SECTION 4: FIRST AID MEASURES

4.1 Description of first aid measures:

The symptoms resulting from intoxication can appear after exposure, therefore, in case of doubt, seek medical attention for direct exposure to the chemical product or persistent discomfort, showing the SDS of this product.

By inhalation:

Remove the person affected from the area of exposure, provide with fresh air and keep at rest. In serious cases such as cardiorespiratory failure, artificial resuscitation techniques will be necessary (mouth to mouth resuscitation, cardiac massage, oxygen supply, etc.) requiring immediate medical assistance.

By skin contact:

Remove contaminated clothing and footwear, rinse skin or shower the person affected if appropriate with plenty of cold water and neutral soap. In serious cases see a doctor. If the product causes burns or freezing, clothing should not be removed as this could worsen the injury caused if it is stuck to the skin. If blisters form on the skin, these should never be burst as this will increase the risk of infection.

By eye contact:

Rinse eyes thoroughly with lukewarm water for at least 15 minutes. Do not allow the person affected to rub or close their eyes. If the injured person uses contact lenses, these should be removed unless they are stuck to the eyes, as this could cause further damage. In all cases, after cleaning, a doctor should be consulted as quickly as possible with the SDS of the product.

By ingestion/aspiration:

Request medical assistance immediately, showing the SDS of this product. Do not induce vomiting, but if it does happen keep the head up to avoid inhalation. In the case of loss of consciousness do not administrate anything orally unless supervised by a doctor. Rinse out the mouth and throat, as they may have been affected during ingestion. Keep the person affected at rest.

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

Acute and delayed effects are indicated in sections 2 and 11.

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

Non-applicable

SECTION 5: FIREFIGHTING MEASURES

5.1 Extinguishing media:

Product is non-flammable under normal conditions of storage, manipulation and use. In the case of inflammation as a result of improper manipulation, storage or use preferably use polyvalent powder extinguishers (ABC powder), in accordance with the Regulation on fire protection systems. IT IS NOT RECOMMENDED to use tap water as an extinguishing agent.

5.2 Special hazards arising from the substance or mixture:

As a result of combustion or thermal decomposition reactive sub-products are created that can become highly toxic and, consequently, can present a serious health risk.

5.3 Advice for firefighters:

Depending on the magnitude of the fire it may be necessary to use full protective clothing and individual respiratory equipment. Minimum emergency facilities and equipment should be available (fire blankets, portable first aid kit,...) in accordance with Directive 89/654/EC.



SECTION 5: FIREFIGHTING MEASURES (continue)

Additional provisions:

Act in accordance with the Internal Emergency Plan and the Information Sheets on actions to take after an accident or other emergencies. Destroy any source of ignition. In case of fire, refrigerate the storage containers and tanks for products susceptible to inflammation, explosion or BLEVE as a result of high temperatures. Avoid spillage of the products used to extinguish the fire into an aqueous medium.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures:

Sweep up and shovel product or other means and place in container for reuse (preferred) or disposal

6.2 Environmental precautions:

This product is not classified as dangerous to the environment. Keep product away from drains, surface and underground water.

6.3 Methods and material for containment and cleaning up:

It is recommended:

Sweep up and shovel product or other means and place in container for reuse (preferred) or disposal

6.4 Reference to other sections:

See sections 8 and 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling:

A.- Precautions for safe manipulation

Comply with the current legislation concerning the prevention of industrial risks. Keep containers hermetically sealed. Control spills and residues, destroying them with safe methods (section 6). Avoid leakages from the container. Maintain order and cleanliness where dangerous products are used.

B.- Technical recommendations for the prevention of fires and explosions

Due to its non-flammable nature, the product does not present a fire risk under normal conditions of storage, manipulation and use.

C.- Technical recommendations to prevent ergonomic and toxicological risks

Do not eat or drink during the process, washing hands afterwards with suitable cleaning products.

- D.- Technical recommendations to prevent environmental risks
- It is recommended to have absorbent material available at close proximity to the product (See subsection 6.3)

7.2 Conditions for safe storage, including any incompatibilities:

A.- Technical measures for storage

Minimum Temp.:	2 °C
Maximun Temp.:	25 °C

Maximum time: 48 Months

B.- General conditions for storage

Avoid sources of heat, radiation, static electricity and contact with food. For additional information see subsection 10.5

7.3 Specific end use(s):

Except for the instructions already specified it is not necessary to provide any special recommendation regarding the uses of this product.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters:

Substances whose occupational exposure limits have to be monitored in the work environment

Nuisance dust: Inhalable dust 10 mg/m3 // Respirable dust 4 mg/m3



SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION (continue)

8.2 Exposure controls:

A.- General security and hygiene measures in the work place

As a preventative measure it is recommended to use basic Personal Protection Equipment, with the corresponding <<CE marking>> in accordance with Directive 89/686/EC. For more information on Personal Protection Equipment (storage, use, cleaning, maintenance, class of protection,...) consult the information leaflet provided by the manufacturer. For more information see subsection 7.1.

All information contained herein is a recommendation which needs some specification from the labour risk prevention services as it is not known whether the company has additional measures at its disposal.

B.- Respiratory protection

Pictogram		PPE	Labelling		CEN Standard		Remarks
Mandatory respiratory tract protection	Filter m	ask for gases and vapours		EN	405:2001+A1:2009	Ci	place when there is a taste or smell of the ontaminant inside the face mask. If the contaminant comes with warnings it is commended to use isolation equipment.
C Specific protecti	on for the	hands					
Pictogram		PPE	Labelling		CEN Standard		Remarks
Mandatory hand protection		sposable chemical tective gloves			EN 374-1:2003 374-3:2003/AC:2006 420:2003+A1:2009	manufa the p	he Breakthrough Time indicated by the acturer must exceed the period during which roduct is being used. Do not use protective ns after the product has come into contact with skin.
D Ocular and facia	l protectio	n					
Pictogram		PPE	Labelling		CEN Standard		Remarks
Mandatory face protection		Face mask		EN	EN 166:2001 EN 167:2001 EN 168:2001 172:1994/A1:2000 172:1994/A2:2001 N ISO 4007:2012		daily and disinfect periodically according to anufacturer's instructions. Use if there is a risk of splashing.
E Bodily protection							
Pictogram		PPE	Labelling		CEN Standard		Remarks
Mandatory complete body protection	protectio	able clothing for n against chemical risks		E	3034:2005+A1:2009 EN 168:2001 EN ISO 13982- 1:2004/A1:2010 N ISO 6529:2001 N ISO 6530:2005 EN 464:1994		professional use only. Clean periodically ording to the manufacturer 's instructions.
Mandatory foot protection		ry footwear for n against chemical risk		I	N ISO 20345:2011 EN 13832-1:2006 N ISO 20344:2011	Re	place boots at any sign of deterioration.
F Additional emergency measures							
Emergency m	Emergency measure		Standards		Emergency measure		Standards
Emergency s			ANSI Z358-1 ISO 3864-1:2002		Eyewash station	S	DIN 12 899 ISO 3864-1:2002
Environmental ex	Environmental exposure controls:						
In accordance with the community legislation for the protection of the environment it is recommended to avoid environmental spillage of both the product and its container. For additional information see subsection 7.1.D							



SECT	TION 9: PHYSICAL AND CHEMICAL PROPER	RTIES				
9.1	9.1 Information on basic physical and chemical properties:					
	For complete information see the product datasheet.					
	Appearance:					
	Physical state at 20 °C:	Solid				
	Appearance:	Not available				
	Color:	Not available				
	Odor:	Not available				
	Volatility:					
	Boiling point at atmospheric pressure:	Non-applicable *				
	Vapour pressure at 20 °C:	Non-applicable *				
	Vapour pressure at 50 °C:	Non-applicable *				
	Evaporation rate at 20 °C:	Non-applicable *				
	Product description:					
	Density at 20 °C:	Non-applicable *				
	Relative density at 20 °C:	Non-applicable *				
	Dynamic viscosity at 20 °C:	Non-applicable *				
	Kinematic viscosity at 20 °C:	Non-applicable *				
	Kinematic viscosity at 40 °C:	Non-applicable *				
	Concentration:	Non-applicable *				
	pH:	Non-applicable *				
	Vapour density at 20 °C:	Non-applicable *				
	Partition coefficient n-octanol/water 20 °C:	Non-applicable *				
	Solubility in water at 20 °C:	Non-applicable *				
	Solubility properties:	Non-applicable *				
	Decomposition temperature:	Non-applicable *				
	Melting point/freezing point:	Non-applicable *				
	Flammability:					
	Flash Point:	Non Flammable (>60 °C)				
	Autoignition temperature:	Non-applicable *				
	Lower flammability limit:	Non-applicable *				
	Upper flammability limit:	Non-applicable *				
9.2	Other information:					
	Surface tension at 20 °C:	Non-applicable *				
	Refraction index:	Non-applicable *				
	*Not relevant due to the nature of the product, not providing	ng information property of its hazards.				

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10.1 Reactivity:

No hazardous reactions are expected if the following technical instructions storage of chemicals. See section 7.

10.2 Chemical stability:

Chemically stable under the conditions of storage, handling and use.

10.3 Possibility of hazardous reactions:

Under the specified conditions, hazardous reactions that lead to excessive temperatures or pressure are not expected.

10.4 Conditions to avoid:



10.5

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SECTION 10: STABILITY AND REACTIVITY (continue)

Applicable for handling and storage at room temperature:

	1 5	5 1					
	Shock and friction	Contact with air	Increase in temperature	Sunlight	Humidity		
	Not applicable	Not applicable	Not applicable	Not applicable	Not applicable		
In	Incompatible materials:						

Acids	Water	Combustive materials	Combustible materials	Others
Produces toxic gases	Not applicable	Avoid direct impact	Not applicable	Not applicable

10.6 Hazardous decomposition products:

See subsection 10.3, 10.4 and 10.5 to find out the specific decomposition products. Depending on the decomposition conditions, complex mixtures of chemical substances can be released: carbon dioxide (CO2), carbon monoxide and other organic compounds.

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects:

The experimental information related to the toxicological properties of the product itself is not available

Dangerous health implications:

In case of exposure that is repetitive, prolonged or at concentrations higher than recommended by the occupational exposure limits, it may result in adverse effects on health depending on the means of exposure:

A.- Ingestion:

- Acute toxicity: The consumption of a considerable dose can cause irritation in the throat, abdominal pain, nausea and vomiting.

- Corrosivity/Irritability: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

B- Inhalation:

- Acute toxicity: Can be fatal after prolonged periods of exposure, as it releases toxic gases when it comes into contact with acids

- Corrosivity/Irritability: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

- C- Contact with the skin and the eyes:
 - Contact with the skin: Above all, may have harmful effects for health if the product is absorbed through the skin. For more information on the secondary effects of contact with the skin see section 2.
 - Contact with the eyes: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.
- D- CMR effects (carcinogenicity, mutagenicity and toxicity to reproduction):

- Carcinogenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for the effects mentioned. For more information see section 3.

- Mutagenicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

- Reproductive toxicity: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

E- Sensitizing effects:

- Respiratory: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous with sensibilizising effects. For more information see section 3.

- Cutaneous: Prolonged contact with the skin can result in episodes of allergic contact dermatitis.
- F- Specific target organ toxicity (STOT)-time exposure:

Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

- G- Specific target organ toxicity (STOT)-repeated exposure:
 - Specific target organ toxicity (STOT)-repeated exposure: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

- Skin: Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

H- Aspiration hazard:



SECTION 11: TOXICOLOGICAL INFORMATION (continue)

Based on available data, the classification criteria are not met, as it does not contain substances classified as dangerous for this effect. For more information see section 3.

Other information:

Non-applicable

Specific toxicology information on the substances:

Identification	Acu	te toxicity	Genus
Sodium mercaptoacetate	LD50 oral	200 mg/kg	Rat
CAS: 367-51-1	LD50 dermal	1596 mg/kg	Rat
EC: 206-696-4	LC50 inhalation	Non-applicable	
Sodium hydrogensulphite	LD50 oral	1540 mg/kg	Rat
CAS: 7631-90-5	LD50 dermal	Non-applicable	
EC: 231-548-0	LC50 inhalation	Non-applicable	

SECTION 12: ECOLOGICAL INFORMATION

The experimental information related to the eco-toxicological properties of the product itself is not available

12.1 Toxicity:

- Not available
- 12.2 Persistence and degradability:

Not available

- 12.3 Bioaccumulative potential: Not available
- 12.4 Mobility in soil: Not available
- 12.5 Results of PBT and vPvB assessment: Non-applicable
- 12.6 Other adverse effects:
 - Not described

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods:

Code	Description	Waste class (Regulation (EU) No 1357/2014)
16 05 06*	Laboratory chemicals, consisting of or containing hazardous substances, including mixtures of laboratory chemicals	Dangerous

Type of waste (Regulation (EU) No 1357/2014):

HP12 Release of an acute toxic gas

Waste management (disposal and evaluation):

Consult the authorized waste service manager on the assessment and disposal operations in accordance with Annex 1 and Annex 2 (Directive 2008/98/EC). As under 15 01 (2014/955/EC) of the code and in case the container has been in direct contact with the product, it will be processed the same way as the actual product. Otherwise, it will be processed as non-dangerous residue. We do not recommended disposal down the drain. See paragraph 6.2.

Regulations related to waste management:

In accordance with Annex II of Regulation (EC) nº1907/2006 (REACH) the community or state provisions related to waste management are stated

Community legislation: Directive 2008/98/EC, 2014/955/EU, Regulation (EU) No 1357/2014



SECTION 14: TRANSPORT INFORMATION

The transport of dangerous goods only applies to finished products.

SECTION 15: REGULATORY INFORMATION

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

Candidate substances for authorisation under the Regulation (EC) 1907/2006 (REACH): Non-applicable

Substances included in Annex XIV of REACH ("Authorisation List") and sunset date: Non-applicable

Regulation (EC) 1005/2009, about substances that deplete the ozone layer: Non-applicable

Active substances for which a decision of non-inclusion onto Annex I (Regulation (EU) No 528/2012): Sodium hydrogensulphite (excluded for the product type 1, 2, 4, 5, 6, 9, 11, 12, 13, 21, 22)

REGULATION (EU) No 649/2012, in relation to the import and export of hazardous chemical products: Non-applicable

Limitations to commercialisation and the use of certain dangerous substances and mixtures (Annex XVII, REACH):

Non-applicable

Specific provisions in terms of protecting people or the environment:

It is recommended to use the information included in this safety data sheet as data used in a risk evaluation of the local circumstances in order to establish the necessary risk prevention measures for the manipulation, use, storage and disposal of this product.

Other legislation:

The product could be affected by sectorial legislation

15.2 Chemical safety assessment:

The supplier has not carried out evaluation of chemical safety.

SECTION 16: OTHER INFORMATION

Legislation related to safety data sheets:

This safety data sheet has been designed in accordance with ANNEX II-Guide to the compilation of safety data sheets of Regulation (EC) Nº 1907/2006 (Regulation (EU) Nº 453/2010, Regulation (EC) Nº 2015/830)

Modifications related to the previous security card which concerns the ways of managing risks. :

Non-applicable

Texts of the legislative phrases mentioned in section 2:

H317: May cause an allergic skin reaction

H302+H312: Harmful if swallowed or in contact with skin

Texts of the legislative phrases mentioned in section 3:

The phrases indicated do not refer to the product itself; they are present merely for informative purposes and refer to the individual components which appear in section 3

CLP Regulation (EC) nº 1272/2008:

Acute Tox. 3: H301 - Toxic if swallowed

Acute Tox. 4: H302 - Harmful if swallowed

Acute Tox. 4: H312 - Harmful in contact with skin

Met. Corr. 1: H290 - May be corrosive to metals Skin Sens. 1: H317 - May cause an allergic skin reaction

Classification and address

Classification procedure:

Skin Sens. 1: Calculation method Acute Tox. 4: Calculation method

Advice related to training:

Minimal training is recommended to prevent industrial risks for staff using this product, in order to facilitate their comprehension and interpretation of this safety data sheet, as well as the label on the product.

Principal bibliographical sources:

http://esis.jrc.ec.europa.eu http://echa.europa.eu http://eur-lex.europa.eu

Abbreviations and acronyms:



SECTION 16: OTHER INFORMATION (continue)

- ADR: European agreement concerning the international carriage of dangerous goods by road
- -IMDG: International maritime dangerous goods code
- -IATA: International Air Transport Association
- -ICAO: International Civil Aviation Organisation
- -COD: Chemical Oxygen Demand
- -BOD5: 5-day biochemical oxygen demand
- -BCF: Bioconcentration factor
- -LD50: Lethal Dose 50
- -CL50: Lethal Concentration 50
- -EC50: Effective concentration 50
- -Log-POW: Octanol-water partition coefficient
- -Koc: Partition coefficient of organic carbon

The information contained in this security data sheet is based on sources, technical knowledge and current legislation at European and state level, without being able to guarantee its accuracy. This information cannot be considered a guarantee of the properties of the product, it is simply a description of the security requirements. The occupational methodology and conditions for users of this product are not within our awareness or control, and it is ultimately the responsibility of the user to take the necessary measures to obtain the legal requirements concerning the manipulation, storage, use and disposal of chemical products. The information on this security data sheet only refers to this product, which should not be used for needs other than those specified.