

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Revision date: 12/12/2014 Version: 1.0

SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. Product identifier

Product form : Substance

Trade name : HYDROCHLORIC ACID

 CAS No
 : 7647-01-0

 Product code
 : AB06031

 Formula
 : HCI

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

Use of the substance/mixture : Laboratory use/Manufacturing component/Research

Use of the substance/mixture : Laboratory chemical

1.3. Details of the supplier of the safety data sheet

AmericanBio, Inc.

15 Erie Dr.

Natick, MA 01760 - USA

T 800.443.0600 - F 508.655.2754

info@americanbio.com - www.americanbio.com

1.4. Emergency telephone number

Emergency number : 855.835.2572 (U.S.) :: 760.602.8703 (Outside U.S.)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification (GHS-US)

Skin Corr. 1A H314 STOT SE 3 H335

2.2. Label elements

GHS-US labeling

Hazard pictograms (GHS-US)



GHS05



Signal word (GHS-US) : Danger

Hazard statements (GHS-US) : H314 - Causes severe skin burns and eye damage

H335 - May cause respiratory irritation

Precautionary statements (GHS-US) : P260 - Do not breathe fume, gas, mist, spray, vapors

P261 - Avoid breathing fume, gas, mist, spray, vapors

P264 - Wash hands, forearms and face thoroughly after handling

P271 - Use only outdoors or in a well-ventilated area

P280 - Wear eye protection, protective clothing, protective gloves, face shield P301+P330+P331 - IF SWALLOWED: rinse mouth. Do NOT induce vomiting

P303+P361+P353 - IF ON SKIN (or hair): Remove/Take off immediately all contaminated

clothing. Rinse skin with water/shower

P304+P340 - IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable

for breathing

P305+P351+P338 - If in eyes: Rinse cautiously with water for several minutes. Remove contact

lenses, if present and easy to do. Continue rinsing

P310 - Immediately call a POISON CENTER or doctor/physician P312 - Call a POISON CENTER/doctor/physician if you feel unwell

P321 - Specific treatment (see SECTION 4 on this label) P363 - Wash contaminated clothing before reuse

P403+P233 - Store in a well-ventilated place. Keep container tightly closed

P405 - Store locked up

P501 - Dispose of contents/container to Local/Federal regulations

12/12/2014 EN (English US) Page 1

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS-US)

No data available

SECTION 3: Composition/information on ingredients

3.1. Substance

Name	Product identifier	%	Classification (GHS-US)
HYDROCHLORIC ACID (Main constituent)	(CAS No) 7647-01-0	100	Skin Corr. 1A, H314 STOT SE 3, H335

Full text of H-phrases: see section 16

3.2. Mixture

Not applicable

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general

: Check the vital functions. Unconscious: maintain adequate airway and respiration. Respiratory arrest: artificial respiration or oxygen. Cardiac arrest: perform resuscitation. Victim conscious with laboured breathing: half-seated. Victim in shock: on his back with legs slightly raised. Vomiting: prevent asphyxia/aspiration pneumonia. Prevent cooling by covering the victim (no warming up). Keep watching the victim. Give psychological aid. Keep the victim calm, avoid physical strain. Depending on the victim's condition: doctor/hospital. Never give anything by mouth to an unconscious person. If you feel unwell, seek medical advice (show the label where possible).

First-aid measures after inhalation

Remove the victim into fresh air. Respiratory problems: consult a doctor/medical service. Remove to fresh air and keep at rest in a position comfortable for breathing. Immediately call a POISON CENTER or doctor/physician. Call a POISON CENTER/doctor/physician if you feel unwell.

First-aid measures after skin contact

Wash immediately with PE-glycol 400. Wash immediately with lots of water (15 minutes)/shower. Remove clothing while washing. Do not remove clothing if it sticks to the skin. Cover wounds with sterile bandage. Consult a doctor/medical service. If burned surface > 10%: take victim to hospital. Remove/Take off immediately all contaminated clothing. Rinse skin with water/shower. Immediately call a POISON CENTER or doctor/physician.

First-aid measures after eye contact

Rinse immediately with plenty of water for 15 minutes. Do not apply neutralizing agents. Take victim to an ophthalmologist. Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediately call a POISON CENTER or doctor/physician.

First-aid measures after ingestion

Rinse mouth with water. Immediately after ingestion: give lots of water to drink. Do not induce vomiting. Immediately consult a doctor/medical service. Call Poison Information Centre (www.big.be/antigif.htm). Take the container/vomit to the doctor/hospital. Do not give chemical antidote. Ingestion of large quantities: immediately to hospital. Rinse mouth. Do NOT induce vomiting. Immediately call a POISON CENTER or doctor/physician.

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

Symptoms/injuries

: Causes severe skin burns and eye damage.

Symptoms/injuries after inhalation

Dry/sore throat. Coughing. Irritation of the respiratory tract. Irritation of the nasal mucous membranes. EXPOSURE TO HIGH CONCENTRATIONS: Respiratory difficulties. Possible laryngeal spasm/oedema. Corrosion of the upper respiratory tract. FOLLOWING SYMPTOMS MAY APPEAR LATER: Risk of pneumonia. Risk of lung oedema. May cause respiratory irritation.

Symptoms/injuries after skin contact

: Caustic burns/corrosion of the skin.

Symptoms/injuries after eye contact

: Corrosion of the eye tissue. Permanent eye damage.

Symptoms/injuries after ingestion

: Burns to the gastric/intestinal mucosa. Blood in vomit. Possible esophageal perforation. Shock.

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

No additional information available

SECTION 5: Firefighting measures

5.1. Extinguishing media

suitable extinguishing media

: EXTINGUISHING MEDIA FOR SURROUNDING FIRES: All extinguishing media allowed. Foam.

Dry powder. Carbon dioxide. Water spray. Sand.

Unsuitable extinguishing media

: No unsuitable extinguishing media known. Do not use a heavy water stream.

12/12/2014 EN (English US) 2/9

Safety Data Sheet

Reactivity

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

5.2. Special hazards arising from the substance or mixture

Fire hazard : DIRECT FIRE HAZARD. Non combustible. INDIRECT FIRE HAZARD. Reactions involving a fire

hazard: see "Reactivity Hazard".

Explosion hazard : INDIRECT EXPLOSION HAZARD. Reactions with explosion hazards: see "Reactivity Hazard".

> Decomposes on exposure to temperature rise: release of (highly) toxic gases/vapours (chlorine). On exposure to air: release of corrosive mist. Reacts violently with (some) bases. Reacts exothermically with many compounds. Reacts with (strong) oxidizers: release of (highly) toxic gases/vapours (chlorine). Reacts with (some) metals: release of highly flammable gases/vapours

(hydrogen). Thermal decomposition generates: Corrosive vapors.

Advice for firefighters

Exposure to fire/heat: keep upwind. Exposure to fire/heat: consider evacuation. Exposure to Precautionary measures fire fire/heat: seal off low-lying areas. Exposure to fire/heat: have neighbourhood close doors and

windows.

Firefighting instructions Dilute toxic gases with water spray. Take account of toxic fire-fighting water. Use water

moderately and if possible collect or contain it. Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Avoid (reject) fire-fighting water to

enter environment.

Protection during firefighting Heat/fire exposure: compressed air/oxygen apparatus. Do not enter fire area without proper

protective equipment, including respiratory protection.

SECTION 6: Accidental release measures

Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

: Gloves. Face-shield. Corrosion-proof suit. Large spills/in enclosed spaces: compressed air Protective equipment

apparatus. Large spills/in enclosed spaces: gas-tight suit. Reactivity hazard: compressed

air/oxygen apparatus. Reactivity hazard: gas-tight suit.

Mark the danger area. No naked flames. In case of hazardous reactions; keep upwind. In case of **Emergency procedures**

reactivity hazard: consider evacuation. Large spills/in confined spaces: consider evacuation.

Wash contaminated clothes. Evacuate unnecessary personnel.

6.1.2. For emergency responders

Protective equipment : Equip cleanup crew with proper protection.

Emergency procedures Ventilate area.

6.2. **Environmental precautions**

Prevent soil and water pollution. Prevent spreading in sewers. Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

Methods and material for containment and cleaning up

: Contain released substance, pump into suitable containers. Consult "Material-handling" to select For containment

material of containers. Plug the leak, cut off the supply. Dam up the liquid spill. Hazardous reaction: measure explosive gas-air mixture. If reacting: dilute combustible/toxic gases/vapours. Take account of toxic/corrosive precipitation water. Heat exposure: dilute toxic gas/vapour with

water spray.

Liquid spill: neutralize with soda (sodium carbonate). Neutralized substance: take up in Methods for cleaning up

absorbent material. Scoop absorbed substance into closing containers. Damaged/cooled tanks

must be emptied. Carefully collect the spill/leftovers. Take collected spill to

manufacturer/competent authority. Clean contaminated surfaces with an excess of water. Wash

clothing and equipment after handling. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

Reference to other sections

See Heading 8. Exposure controls and personal protection.

12/12/2014 EN (English US) 3/9

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling

Hygiene measures

: Comply with the legal requirements. Remove contaminated clothing immediately. Clean contaminated clothing. Thoroughly clean/dry the installation before use. Do not discharge the waste into the drain. Keep away from naked flames/heat. Observe strict hygiene. Keep container tightly closed. Measure the concentration in the air regularly. Carry operations in the open/under local exhaust/ventilation or with respiratory protection. Wash hands and other exposed areas with mild soap and water before eat, drink or smoke and when leaving work. Provide good ventilation in process area to prevent formation of vapor. Do not breathe

fume/gas/mist/vapours/spray. Avoid contact during pregnancy/while nursing. Avoid breathing fume/gas/mist/vapours/spray. Use only outdoors or in a well-ventilated area.

: Wash hands, forearms, face thoroughly after handling.

7.2. Conditions for safe storage, including any incompatibilities

Technical measures : Comply with applicable regulations.

Storage conditions : Keep only in the original container in a cool, well ventilated place away from : Direct sunlight.,

Heat sources. Keep container tightly closed.

Incompatible products : Strong bases. strong acids.

Incompatible materials : Sources of ignition. Direct sunlight.

Storage temperature : 2 - 25 °C

Heat-ignition : KEEP SUBSTANCE AWAY FROM: heat sources.

Prohibitions on mixed storage : KEEP SUBSTANCE AWAY FROM: oxidizing agents. (strong) bases. metals. amines.

Storage area : Ventilation at floor level. Keep locked up. Provide for a tub to collect spills. Meet the legal

requirements.

Special rules on packaging : SPECIAL REQUIREMENTS: closing, corrosion-proof, clean, correctly labelled, meet the legal

requirements. Secure fragile packagings in solid containers.

Packaging materials : MATERIAL TO AVOID: steel. metal.

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No additional information available

8.2. Exposure controls

Personal protective equipment : Avoid all unnecessary exposure.

Materials for protective clothing : GIVE GOOD RESISTANCE: natural rubber. nitrile rubber.

Hand protection : Gloves. Wear protective gloves.

Eye protection : Chemical goggles or face shield. Face shield.

Skin and body protection : Corrosion-proof clothing. Wear suitable protective clothing.

Respiratory protection : Gas mask with filter type B. Gas mask with filter type E. High vapour/gas concentration: self-

contained respirator. Wear approved mask.

Other information : When using, do not eat, drink or smoke.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid
Appearance : Liquid.
Molecular mass : 36.46 g/mol
Color : Colourless.

Odor : Irritating/pungent odour.
Odor threshold : No data available

pH : < '

Relative evaporation rate (butyl acetate=1) : No data available Melting point : No data available

Freezing point : -30 °C

Boiling point : No data available

12/12/2014 EN (English US) 4/9

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Flash point : Not applicable
Self ignition temperature : Not applicable
Decomposition temperature : No data available
Flammability (solid, gas) : No data available
Vapor pressure : No data available
Relative vapor density at 20 °C : No data available

Relative density : 1.2

Density : 1190 kg/m³
Solubility : Soluble in water.
Water: Complete

Log Pow : 0.25 (QSAR)
Log Kow : No data available
Viscosity, kinematic : No data available
Viscosity, dynamic : 0.0023 Pa.s (15 °C)
Explosive properties : No data available
Oxidizing properties : No data available
Explosive limits : No data available

9.2. Other information

Minimum ignition energy : Not applicable VOC content : Not applicable

Other properties : Gas/vapour heavier than air at 20°C. Producing fumes/mist. Substance has acid reaction.

SECTION 10: Stability and reactivity

10.1. Reactivity

Decomposes on exposure to temperature rise: release of (highly) toxic gases/vapours (chlorine). On exposure to air: release of corrosive mist. Reacts violently with (some) bases. Reacts exothermically with many compounds. Reacts with (strong) oxidizers: release of (highly) toxic gases/vapours (chlorine). Reacts with (some) metals: release of highly flammable gases/vapours (hydrogen). Thermal decomposition generates: Corrosive vapors.

10.2. Chemical stability

No data available. Not established.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

10.5. Incompatible materials

strong acids. Strong bases.

10.6. Hazardous decomposition products

fume. Carbon monoxide. Carbon dioxide. Thermal decomposition generates: Corrosive vapors.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

Skin corrosion/irritation : Causes severe skin burns and eye damage.

pH: < 1

Serious eye damage/irritation : Not classified

pH: < 1

Respiratory or skin sensitization : Not classified
Germ cell mutagenicity : Not classified
Carcinogenicity : Not classified

HYDROCHLORIC ACID (7647-01-0)

IARC group 3 - Not Classifiable

Reproductive toxicity : Not classified

12/12/2014 EN (English US) 5/9

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Specific target organ toxicity (single exposure) : May cause respiratory irritation.

Specific target organ toxicity (repeated

exposure)

: Not classified

Aspiration hazard : Not classified

Potential Adverse human health effects and symptoms

: Based on available data, the classification criteria are not met.

Symptoms/injuries after inhalation

: Dry/sore throat. Coughing. Irritation of the respiratory tract. Irritation of the nasal mucous membranes. EXPOSURE TO HIGH CONCENTRATIONS: Respiratory difficulties. Possible laryngeal spasm/oedema. Corrosion of the upper respiratory tract. FOLLOWING SYMPTOMS MAY APPEAR LATER: Risk of pneumonia. Risk of lung oedema. May cause respiratory irritation

: Caustic burns/corrosion of the skin.

Symptoms/injuries after skin contact Symptoms/injuries after eye contact

: Corrosion of the eye tissue. Permanent eye damage.

Symptoms/injuries after ingestion

: Burns to the gastric/intestinal mucosa. Blood in vomit. Possible esophageal perforation. Shock.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - water

: Mild water pollutant (surface water). Ground water pollutant. Maximum concentration in drinking water: 250 mg/l (chloride) (Directive 98/83/EC). Slightly harmful to fishes. Toxic to plankton. pH shift. Insufficient data available on ecotoxicity.

HYDROCHLORIC ACID (7647-01-0)	
LC50 fish 1	282 mg/l (96 h; Gambusia affinis; Pure substance)
EC50 Daphnia 1	< 56 mg/l (72 h; Daphnia magna; Pure substance)
LC50 fish 2	862 mg/l (Leuciscus idus; Pure substance)
TLM fish 1	282 ppm (96 h; Gambusia affinis; Pure substance)

12.2. Persistence and degradability

HYDROCHLORIC ACID (7647-01-0)	
Persistence and degradability	Biodegradability: not applicable. No (test)data on mobility of the components available. Not established.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
BOD (% of ThOD)	Not applicable

12.3. Bioaccumulative potential

HYDROCHLORIC ACID (7647-01-0)	
Log Pow	0.25 (QSAR)
Bioaccumulative potential	Low potential for bioaccumulation (Log Kow < 4). Not established.

12.4. Mobility in soil

HYDROCHLORIC ACID (7647-01-0)	
Ecology - soil	May be harmful to plant growth, blooming and fruit formation.

12.5. Other adverse effects

Other information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste disposal recommendations

: Remove waste in accordance with local and/or national regulations. Hazardous waste shall not be mixed together with other waste. Different types of hazardous waste shall not be mixed together if this may entail a risk of pollution or create problems for the further management of the waste. Hazardous waste shall be managed responsibly. All entities that store, transport or handle hazardous waste shall take the necessary measures to prevent risks of pollution or damage to people or animals. Recycle by distillation. Dehydrate/make insoluble. Immobilize the toxic or harmful components. Remove to an authorized dump (Class I). Treat using the best available techniques before discharge into drains or the aquatic environment. Dispose in a safe manner in accordance with local/national regulations. Dispose of contents/container to Local/Federal regulations.

12/12/2014 EN (English US) 6/9

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Additional information : LWCA (the Netherlands): KGA category 01. Hazardous waste according to Directive

2008/98/EC.

Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

In accordance with DOT

Transport document description : UN1789 Hydrochloric acid, 8, II

UN-No.(DOT) : 1789 DOT NA no. : UN1789

DOT Proper Shipping Name : Hydrochloric acid

Department of Transportation (DOT) Hazard

Classes

: 8 - Class 8 - Corrosive material 49 CFR 173.136

Hazard labels (DOT) : 8 - Corrosive



Packing group (DOT) : II - Medium Danger

DOT Special Provisions (49 CFR 172.102)

A3 - For combination packaging, if glass inner packaging (including ampoules) are used, they must be packed with absorbent material in tightly closed metal receptacles before packing in outer packaging.

A6 - For combination packaging, if plastic inner packaging are used, they must be packed in tightly closed metal receptacles before packing in outer packaging.

B3 - MC 300, MC 301, MC 302, MC 303, MC 305, and MC 306 and DOT 406 cargo tanks and DOT 57 portable tanks are not authorized.

B15 - Packaging must be protected with non-metallic linings impervious to the lading or have a suitable corrosion allowance.

IB2 - Authorized IBCs: Metal (31A, 31B and 31N); Rigid plastics (31H1 and 31H2); Composite (31HZ1). Additional Requirement: Only liquids with a vapor pressure less than or equal to 110 kPa at 50 C (1.1 bar at 122 F), or 130 kPa at 55 C (1.3 bar at 131 F) are authorized.

N41 - Metal construction materials are not authorized for any part of a packaging which is normally in contact with the hazardous material.

T8 - 4 178.274(d)(2) Normal..... Prohibited

TP2 - a. The maximum degree of filling must not exceed the degree of filling determined by the following: (image) Where: tr is the maximum mean bulk temperature during transport, tf is the temperature in degrees celsius of the liquid during filling, and a is the mean coefficient of cubical expansion of the liquid between the mean temperature of the liquid during filling (tf) and the maximum mean bulk temperature during transportation (tr) both in degrees celsius. b. For liquids transported under ambient conditions may be calculated using the formula: (image) Where: d15 and d50 are the densities (in units of mass per unit volume) of the liquid at 15 C (59 F) and 50 C (122 F), respectively.

TP12 - This material is considered highly corrosive to steel.

DOT Packaging Exceptions (49 CFR 173.xxx) : 154
DOT Packaging Non Bulk (49 CFR 173.xxx) : 202
DOT Packaging Bulk (49 CFR 173.xxx) : 242
DOT Quantity Limitations Passenger aircraft/rail : 1 L

(49 CFR 173.27)

DOT Quantity Limitations Cargo aircraft only (49 : 30 L

CFR 175.75)

DOT Vessel Stowage Location : C - The material must be stowed "on deck only" on a cargo vessel and on a passenger vessel.

Additional information

Other information : No supplementary information available.

State during transport (ADR-RID) : as liquid.

ADR

Transport document description : UN 1789, 8, II, (E)

Packing group (ADR) : I

Class (ADR) : 8 - Corrosive substances

Hazard identification number (Kemler No.) : 80
Classification code (ADR) : C1

12/12/2014 EN (English US) 7/9

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

Danger labels (ADR) : 8 - Corrosive substances

8

Orange plates

80 1789

Tunnel restriction code : E

Transport by sea

UN-No. (IMDG) : 1789

Class (IMDG) : 8 - Corrosive substances

EmS-No. (1) : F-A EmS-No. (2) : S-B

Air transport

UN-No.(IATA) : 1789

Class (IATA) : 8 - Corrosives
Packing group (IATA) : II - Medium Danger

SECTION 15: Regulatory information

15.1. US Federal regulations

HYDROCHLORIC ACID (7647-01-0)	
Listed on the United States TSCA (Toxic Substances Control Act) inventory Listed on SARA Section 313 (Specific toxic chemical listings)	
RQ (Reportable quantity, section 304 of EPA's List of Lists) :	5000 lb

15.2. International regulations

CANADA

No additional information available

EU-Regulations

No additional information available

Classification according to Regulation (EC) No. 1272/2008 [CLP]

Skin Corr. 1B H314 STOT SE 3 H335

Full text of H-phrases: see section 16

Classification according to Directive 67/548/EEC or 1999/45/EC

C; R34 Xi; R37

Full text of R-phrases: see section 16

15.2.2. National regulations

No additional information available

15.3. US State regulations

HYDROCHLORIC ACID(7647-01-0)	
State or local regulations	U.S Massachusetts - Right To Know List
	U.S New Jersey - Right to Know Hazardous Substance List

12/12/2014 EN (English US) 8/9

Safety Data Sheet

according to Federal Register / Vol. 77, No. 58 / Monday, March 26, 2012 / Rules and Regulations

HYDROCHLORIC ACID(7647-01-0)	
	U.S Pennsylvania - RTK (Right to Know) List

SECTION 16: Other information

Other information : None.

Full text of H-phrases: see section 16:

Skin Corr. 1A	Skin corrosion/irritation Category 1A
STOT SE 3	Specific target organ toxicity (single exposure) Category 3
H314	Causes severe skin burns and eye damage
H335	May cause respiratory irritation

NFPA health hazard : 3 - Short exposure could cause serious temporary or

residual injury even though prompt medical attention was

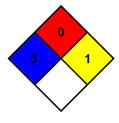
given.

NFPA fire hazard : 0 - Materials that will not burn.

NFPA reactivity : 1 - Normally stable, but can become unstable at elevated

temperatures and pressures or may react with water with

some release of energy, but not violently.



SDS US (GHS HazCom 2012)

AmericanBio, Inc. does not make any representations, guaranties or warranties as to the accuracy of the information provided in this Safety Data Sheet, which has been provided by a third party, is made in accordance with United States Global Harmonization System (GHS) initiative HAZCOM 2012 (Federal Register, Vol. 77, No. 58, Monday March 26, 2012/Rules and Regulations), and is intended only to describe the product for the purposes of health, safety and environmental requirements. It is expressly understood and agreed that AmericanBio, Inc. shall in no way be deemed or held to be obligated, ifable, or accountable upon or under any guaranties or warranties, express or implied, statutory, by operation of law, or otherwise, in any manner or form, including any implied warranty of merchantability or filness for a particular purpose, that in any way relates to or arises out of the information provided in this Safety Data Sheet.

12/12/2014 EN (English US) 9/9