SAFETY DATA SHEET



MULTISTIX 10 SG

MSDS no. 2161

Section 1. Identification

GHS product identifier

: MULTISTIX 10 SG

Product code

: 2161, 10336425, 2300A, 10339493, 2169, 10339695, 08566001, 2292, 10319565,

03783489

Other means of

: Not available.

identification Product type

: Solid.

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

Not applicable.

Manufactured/supplied

Siemens Healthcare Diagnostics Inc.

511 Benedict Avenue

Tarrytown, NY 10591-5097 USA

1-877-229-3711

(800) 424-9300 (CHEMTREC) (24/365)

Section 2. Hazards identification

OSHA/HCS status

: This material is not considered hazardous by the OSHA Hazard Communication

Standard (29 CFR 1910.1200).

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

Prevention: Not applicable.Response: Not applicable.Storage: Not applicable.Disposal: Not applicable.Hazards not otherwise: None known.

classified

Section 3. Composition/information on ingredients

Substance/mixture : Mixture

Ingredient name	%	CAS number
boric acid	0.11328	10043-35-3

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 as hazardous to health or the environment and hence require reporting in this section.

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

Date of issue/Date of revision :	7/27/2015. Date of p	previous issue : 6/30	80/2015. Version	: 1.03 1/10
----------------------------------	----------------------	-----------------------	------------------	-------------

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.

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

medical attention if symptoms occur.

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. Remove victim to fresh air and keep at rest in a position

comfortable for breathing. 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

Eye contact
 Inhalation
 No known significant effects or critical hazards.
 Skin contact
 No known significant effects or critical hazards.
 Ingestion
 No known significant effects or critical hazards.
 No known significant effects or critical hazards.

Over-exposure signs/symptoms

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

Suitable extinguishing

: In case of fire, use water spray (fog), foam or dry chemical.

Unsuitable extinguishing

media

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.

Date of issue/Date of revision : 7/27/2015. Date of previous issue : 6/30/2015. Version : 1.03 2/10

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. Put on appropriate personal protective equipment.

For emergency responders

If 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".

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. Prevent entry into sewers, water courses, basements or confined areas. Vacuum or sweep up material and place in a designated, labeled waste container. Dispose of via a licensed waste disposal contractor. Note: see Section 1 for emergency contact information and Section 13 for waste disposal.

Section 7. Handling and storage

Precautions for safe handling

Protective measures

Advice on general occupational hygiene

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

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 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.

Section 8. Exposure controls/personal protection

Control parameters

Occupational exposure limits

Ingredient name	Exposure limits
boric acid	ACGIH TLV (United States, 6/2013). STEL: 6 mg/m³ 15 minutes. Form: Inhalable fraction TWA: 2 mg/m³ 8 hours. Form: Inhalable fraction

Appropriate engineering controls

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

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.

Individual protection measures

Date of issue/Date of revision : 7/27/2015. Date of previous issue : 6/30/2015. Version : 1.03 3/10

Section 8. Exposure controls/personal protection

Hygiene measures

: Wash 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.

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 sideshields.

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.

Body 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.

Other skin protection

: 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.

Respiratory protection

Use a properly fitted, particulate filter respirator complying with an approved standard if a risk assessment indicates this is necessary. Respirator selection must be based on known or anticipated exposure levels, the hazards of the product and the safe working limits of the selected respirator.

Section 9. Physical and chemical properties

Physical state : Solid. Color White. Odor Odorless. pН : Not applicable. Flash point : Not available. Flammability (solid, gas) : Not available. : Not available. Relative density Solubility in water : Not available. Partition coefficient: n-: Not available. octanol/water

Auto-ignition temperature

: Not available.
: Not available.

Section 10. Stability and reactivity

Reactivity

Viscosity

: 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.

Date of issue/Date of revision

: 7/27/2015.

Date of previous issue

: 6/30/2015

Version : 1.03

4/10

Section 11. Toxicological information

Information on toxicological effects

Acute toxicity

Not available.

Irritation/Corrosion

Product/ingredient name	Result	Species	Score	Exposure	Observation
boric acid	Skin - Mild irritant	Human		72 hours 15 milligrams Intermittent	-

Sensitization

Not available.

Mutagenicity

Not available.

Carcinogenicity

Not available.

Reproductive toxicity

Not available.

Teratogenicity

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

: Not available.

Potential acute health effects

Eye contact
 Inhalation
 No known significant effects or critical hazards.
 Skin contact
 No known significant effects or critical hazards.
 Ingestion
 No known significant effects or critical hazards.
 No known significant effects or critical hazards.

Symptoms related to the physical, chemical and toxicological characteristics

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

Delayed and immediate effects and also chronic effects from short and long term exposure

Short term exposure

Potential immediate : Not available.

effects

Potential delayed effects : Not available.

Long term exposure

Potential immediate : Not available.

effects

Date of issue/Date of revision : 7/27/2015. Date of previous issue : 6/30/2015. Version : 1.03 5/10

Section 11. Toxicological information

Potential delayed effects : Not available.

Potential chronic health effects

Not 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.
 Teratogenicity : No known significant effects or critical hazards.
 Developmental effects : No known significant effects or critical hazards.
 Fertility effects : No known significant effects or critical hazards.

Numerical measures of toxicity

Acute toxicity estimates

Not available.

Section 12. Ecological information

Toxicity

Product/ingredient name	Result	Species	Exposure
boric acid	Acute LC50 84.28 mg/l Marine water	Crustaceans - Americamysis bahia - Juvenile (Fledgling, Hatchling, Weanling)	48 hours
	Acute LC50 133000 μg/l Fresh water	Daphnia - Daphnia magna - Neonate	48 hours
	Acute LC50 100000 μg/l Fresh water	Fish - Ptychocheilus lucius - Juvenile (Fledgling, Hatchling, Weanling)	96 hours
	Chronic NOEC 6000 µg/l Fresh water Chronic NOEC 2100 µg/l Fresh water	Daphnia - Daphnia magna Fish - Oncorhynchus mykiss	21 days 87 days

Persistence and degradability

Not available.

Bioaccumulative potential

Product/ingredient name	LogPow	BCF	Potential
boric acid	-1.09	-	low

Mobility in soil

Soil/water partition coefficient (Koc)

: 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

Date of issue/Date of revision : 7/27/2015. Date of previous issue : 6/30/2015. Version : 1.03 6/10

Section 13. Disposal considerations

dispersal of spilled material and runoff and contact with soil, waterways, drains and

Section 14. Transport information

DOT Classification

UN number Not regulated.

UN proper shipping name

Transport hazard class(es)

Packing group

Environmental hazards

No.

Additional

information

TDG Classification

Not regulated. **UN** number

UN proper shipping name

Transport hazard class(es)

Packing group

Environmental

hazards

No.

Additional information

Mexico Classification

UN number Not regulated.

UN proper shipping name

Transport

hazard class(es)

Packing group

Environmental

No.

hazards

Additional information

ADR/RID

Date of issue/Date of revision : 7/27/2015. Date of previous issue : 6/30/2015. Version: 1.03 7/10 Section 14. Transport information

UN number Not regulated.

UN proper -

Packing group Environmental No.
hazards

Additional information

shipping name Transport

IMDG

UN number Not regulated.

UN proper shipping name Transport hazard class(es)

Packing group Environmental No. hazards

Additional information

IATA

UN number Not regulated.

UN proper shipping name Transport hazard class(es)

Packing group - Environmental No.

hazards

Additional information

Special precautions for user : Transport 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.

Date of issue/Date of revision : 7/27/2015. Date of previous issue : 6/30/2015. Version : 1.03 8/10

Section 14. Transport information

Transport in bulk according: Not available.

to Annex II of MARPOL 73/78 and the IBC Code

Section 15. Regulatory information

U.S. Federal regulations : TSCA 8(a) CDR Exempt/Partial exemption: Not determined

United States inventory (TSCA 8b): Not determined.

Clean Water Act (CWA) 307: arsanilic acid

Clean Water Act (CWA) 311: Iron chloride (FeCl3), hexahydrate

Clean Air Act Section 112

(b) Hazardous Air **Pollutants (HAPs)** : Not listed

Clean Air Act Section 602

: Not listed

Class I Substances

Clean Air Act Section 602

: Not listed

Class II Substances

DEA List I Chemicals

: Not listed

(Precursor Chemicals)

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

Name		hazard	Sudden release of pressure		(acute) health	Delayed (chronic) health hazard
boric acid	0.11328	No.	No.	No.	No.	Yes.

State regulations

Massachusetts : None of the components are listed. **New York** : None of the components are listed. **New Jersey** : None of the components are listed. Pennsylvania : None of the components are listed.

California Prop. 65

WARNING: This product contains less than 0.1% of a chemical known to the State of California to cause cancer.

Ingredient name	Cancer	•		Maximum acceptable dosage level
p-arsanilic acid	Yes.		0.06 μg/day (inhalation)	No.

Canada inventory : Not determined.

International regulations

Date of issue/Date of revision 9/10 : 7/27/2015 Date of previous issue : 6/30/2015 Version: 1.03

Section 15. Regulatory information

International lists : Australia inventory (AICS): Not determined.

China inventory (IECSC): Not determined.

Japan inventory: Not determined. Korea inventory: Not determined.

Malaysia Inventory (EHS Register): Not determined.

New Zealand Inventory of Chemicals (NZIoC): Not determined.

Philippines inventory (PICCS): Not determined. Taiwan inventory (CSNN): Not determined.

Chemical Weapons Convention List Schedule

I Chemicals

: Not listed

Chemical Weapons

Convention List Schedule

II Chemicals

: Not listed

Chemical Weapons

Convention List Schedule

III Chemicals

: Not listed

Section 16. Other information

History

Date of issue/Date of

revision

: 7/27/2015.

Version : 1.03

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 73/78 = International Convention for the Prevention of Pollution From Ships,

1973 as modified by the Protocol of 1978. ("Marpol" = marine pollution)

UN = United Nations

▼ Indicates information that has changed from previously issued version.

Notice to reader

Allergen Not available.

Date of issue/Date of revision : 7/27/2015 Date of previous issue : 6/30/2015 Version: 1.03 10/10