



Multi-component Standard Solution for Ion Chromatography. 7 Components in water

Safety Data Sheet

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

Date of issue: 08/29/2014

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Version: 1.1

SECTION 1: Identification

1.1. Identification

Product form : Mixture
Name : Multi-component Standard Solution for Ion Chromatography.
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Product code : A101

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

No additional information available

1.3. Details of the supplier of the safety data sheet

Spectracer UK Ltd.

Second Floor,
27 Gloucester Place,
London,
W1U 8HU,
United Kingdom.

Tel: +44 (0) 207 193 9114

Fax: +44 (0) 203 432 4686

Email: contact@spectracer.co.uk

Web: www.spectracer.com

1.4. Emergency telephone number

Emergency number : Tel: +44(0)1933445260 Option 1. Language: English only.
For Chemical Emergencies Only
Llewellyn (Safety Advisors) Europe Ltd

SECTION 2: Hazard(s) identification

2.1. Classification of the substance or mixture

GHS-US classification

Not classified

2.2. Label elements

GHS-US labeling

No labeling applicable

2.3. Other hazards

No additional information available

2.4. Unknown acute toxicity (GHS US)

Not applicable

SECTION 3: Composition/Information on ingredients

3.1. Substance

Not applicable

3.2. Mixture

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Name	Product identifier	%	GHS-US classification
ammonium dihydrogen phosphate	(CAS No) 7722-76-1	< 0.1	Not classified
sodium fluoride	(CAS No) 7681-49-4	< 0.1	Acute Tox. 3 (Oral), H301 Skin Irrit. 2, H315 Eye Irrit. 2A, H319 Aquatic Acute 3, H402
sodium chloride	(CAS No) 7647-14-5	< 0.1	Not classified
sodium nitrite	(CAS No) 7632-00-0	< 0.1	Ox. Sol. 3, H272 Acute Tox. 3 (Oral), H301 Aquatic Acute 1, H400
potassium bromide	(CAS No) 7758-02-3	< 0.1	Not classified
sodium nitrate	(CAS No) 7631-99-4	< 0.1	Acute Tox. 4 (Oral), H302 Eye Irrit. 2A, H319
ammonium sulfate	(CAS No) 7783-20-2	< 0.1	Not classified

Full text of hazard classes and H-statements : see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: 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 person to fresh air and keep comfortable for breathing. Allow victim to breathe fresh air. Allow the victim to rest.
First-aid measures after skin contact	: Remove affected clothing and wash all exposed skin area with mild soap and water, followed by warm water rinse. Wash skin with plenty of water.
First-aid measures after eye contact	: Rinse immediately with plenty of water. Obtain medical attention if pain, blinking or redness persist. Rinse eyes with water as a precaution.
First-aid measures after ingestion	: Rinse mouth. Do NOT induce vomiting. Obtain emergency medical attention. Call a poison center/doctor/physician if you feel unwell.

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

Symptoms/injuries	: Not expected to present a significant hazard under anticipated conditions of normal use.
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4.3. Indication of any immediate medical attention and special treatment needed

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

Suitable extinguishing media	: Foam. Dry powder. Carbon dioxide. Water spray. Sand.
Unsuitable extinguishing media	: Do not use a heavy water stream.

5.2. Special hazards arising from the substance or mixture

Reactivity	: The product is non-reactive under normal conditions of use, storage and transport.
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5.3. Advice for firefighters

Firefighting instructions	: Use water spray or fog for cooling exposed containers. Exercise caution when fighting any chemical fire. Prevent fire-fighting water from entering environment.
Protection during firefighting	: Do not enter fire area without proper protective equipment, including respiratory protection. Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Emergency procedures	: Ventilate spillage area. Evacuate unnecessary personnel.
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6.1.2. For emergency responders

Protective equipment	: Do not attempt to take action without suitable protective equipment. Equip cleanup crew with proper protection. For further information refer to section 8: "Exposure controls/personal protection".
Emergency procedures	: Ventilate area.

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6.2. Environmental precautions

Avoid release to the environment. Prevent entry to sewers and public waters. Notify authorities if liquid enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

Methods for cleaning up : Take up liquid spill into absorbent material. Soak up spills with inert solids, such as clay or diatomaceous earth as soon as possible. Collect spillage. Store away from other materials.

Other information : Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

See Heading 8. Exposure controls and personal protection. For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling : Ensure good ventilation of the work station. Wear personal protective equipment. Wash hands and other exposed areas with mild soap and water before eating, drinking or smoking and when leaving work. Provide good ventilation in process area to prevent formation of vapor.

Hygiene measures : Do not eat, drink or smoke when using this product. Always wash hands after handling the product.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions : Keep container closed when not in use. Keep only in the original container in a cool, well ventilated place away from : Direct sunlight, Heat-ignition. Store in a well-ventilated place. Keep cool.

Incompatible products : Strong bases. Strong acids.

Incompatible materials : Sources of ignition. Direct sunlight.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

sodium fluoride (7681-49-4)		
ACGIH	ACGIH TWA (mg/m ³)	2.5 mg/m ³ (Fluorides, as F; USA; Time-weighted average exposure limit 8 h; TLV - Adopted Value)
Not applicable		
sodium chloride (7647-14-5)		
Not applicable		
sodium nitrite (7632-00-0)		
Not applicable		
potassium bromide (7758-02-3)		
Not applicable		
sodium nitrate (7631-99-4)		
Not applicable		
ammonium dihydrogen phosphate (7722-76-1)		
Not applicable		
ammonium sulfate (7783-20-2)		
Not applicable		

8.2. Exposure controls

Appropriate engineering controls : Provide adequate general and local exhaust ventilation. Ensure good ventilation of the work station.

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Personal protective equipment : Protective goggles. Gloves.



Hand protection : Wear protective gloves.
Eye protection : Chemical goggles or safety glasses. Safety glasses.
Skin and body protection : Wear suitable protective clothing.
Respiratory protection : Where exposure through inhalation may occur from use, respiratory protection equipment is recommended.
Environmental exposure controls : Avoid release to the environment.
Other information : Do not eat, drink or smoke during use.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state : Liquid
Color : Colorless
Odor : characteristic
Odor threshold : No data available
pH : No data available
Melting point : Not applicable
Freezing point : No data available
Boiling point : No data available
Flash point : No data available
Relative evaporation rate (butyl acetate=1) : No data available
Flammability (solid, gas) : Non flammable.
Vapor pressure : No data available
Relative vapor density at 20 °C : No data available
Relative density : 1.01
Solubility : No data available
Log Pow : No data available
Auto-ignition temperature : No data available
Decomposition temperature : No data available
Viscosity, kinematic : No data available
Viscosity, dynamic : No data available
Explosion limits : No data available
Explosive properties : No data available
Oxidizing properties : No data available

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Not established.

10.3. Possibility of hazardous reactions

Not established.

10.4. Conditions to avoid

Direct sunlight. Extremely high or low temperatures.

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10.5. Incompatible materials

Strong acids. Strong bases.

10.6. Hazardous decomposition products

Fume. Carbon monoxide. Carbon dioxide.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity : Not classified

sodium fluoride (7681-49-4)	
LD50 oral rat	52 mg/kg (Rat)
ATE US (oral)	52.000 mg/kg body weight

sodium chloride (7647-14-5)	
LD50 oral rat	3000 mg/kg (Rat; Experimental value; 3550 mg/kg bodyweight; Rat; Experimental value)
LD50 dermal rabbit	> 10000 mg/kg (Rabbit; Experimental value)
ATE US (oral)	3000.000 mg/kg body weight

sodium nitrite (7632-00-0)	
LD50 oral rat	180 mg/kg (Rat; Other; Experimental value)
LC50 inhalation rat (mg/l)	5.5 mg/l/4h (Rat; Literature study)
ATE US (oral)	180.000 mg/kg body weight
ATE US (vapors)	5.500 mg/l/4h
ATE US (dust, mist)	5.500 mg/l/4h

potassium bromide (7758-02-3)	
LD50 oral rat	3070 mg/kg (Rat)
ATE US (oral)	3070.000 mg/kg body weight

sodium nitrate (7631-99-4)	
LD50 oral rat	1270 mg/kg (Rat; Equivalent or similar to OECD 401; Experimental value; 3430 mg/kg bodyweight; Rat)
LD50 dermal rat	> 5000 mg/kg body weight (Rat; Read-across; OECD 402: Acute Dermal Toxicity)
ATE US (oral)	1270.000 mg/kg body weight

ammonium dihydrogen phosphate (7722-76-1)	
LD50 oral rat	5750 mg/kg (Rat)
LD50 dermal rabbit	> 7940 mg/kg (Rabbit)
ATE US (oral)	5750.000 mg/kg body weight

ammonium sulfate (7783-20-2)	
LD50 oral rat	2840 mg/kg (Rat)
ATE US (oral)	2840.000 mg/kg body weight

Skin corrosion/irritation : Not classified
Serious eye damage/irritation : Not classified
Respiratory or skin sensitization : Not classified
Germ cell mutagenicity : Not classified
Based on available data, the classification criteria are not met
Carcinogenicity : Not classified

sodium fluoride (7681-49-4)	
IARC group	3 - Not classifiable

Reproductive toxicity : Not classified
Based on available data, the classification criteria are not met
Specific target organ toxicity (single exposure) : Not classified

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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.

SECTION 12: Ecological information

12.1. Toxicity

Ecology - general : The product is not considered harmful to aquatic organisms or to cause long-term adverse effects in the environment.

sodium fluoride (7681-49-4)	
LC50 fish 1	> 530 mg/l (LC50; 96 h)
EC50 Daphnia 1	98 mg/l (EC50; 48 h)

sodium chloride (7647-14-5)	
LC50 fish 2	5840 mg/l (LC50; ASTM; 96 h; Lepomis macrochirus; Flow-through system; Fresh water; Experimental value)
Threshold limit algae 2	2430 mg/l (EC50; OECD 201: Alga, Growth Inhibition Test; 120 h; Algae; Static system; Fresh water; Experimental value)

potassium bromide (7758-02-3)	
LC50 fish 1	> 30 mg/l (LC50; 96 h)
EC50 Daphnia 1	> 30 mg/l (EC50; 96 h)

sodium nitrate (7631-99-4)	
EC50 other aquatic organisms 1	> 1700 mg/l (10 days; Algae; EC50; Other)
LC50 fish 2	4650 mg/l (LC50; Other; 96 h; Salmo gairdneri; Static system; Fresh water; Experimental value)
EC50 Daphnia 2	7240 mg/l (EC50; OECD 202: Daphnia sp. Acute Immobilisation Test; 24 h; Daphnia magna; Static system; Fresh water; Experimental value)

ammonium dihydrogen phosphate (7722-76-1)	
LC50 fish 1	155 mg/l (96 h; Pimephales promelas)

ammonium sulfate (7783-20-2)	
EC50 Daphnia 1	202 mg/l (EC50; 96 h)
LC50 fish 2	250 - 480 mg/l (LC50; 96 h; Brachydanio rerio)

12.2. Persistence and degradability

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Persistence and degradability	Not established.

sodium fluoride (7681-49-4)	
Persistence and degradability	Biodegradability: Not applicable.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable

sodium chloride (7647-14-5)	
Persistence and degradability	Biodegradability: Not applicable. No (test)data available on mobility of the substance.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable

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sodium nitrite (7632-00-0)	
Persistence and degradability	Biodegradable in water. Autooxidation in water. No (test)data available on mobility of the substance.
potassium bromide (7758-02-3)	
Persistence and degradability	Biodegradability: Not applicable.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
sodium nitrate (7631-99-4)	
Persistence and degradability	Biodegradability: Not applicable. No (test)data available on mobility of the substance.
Biochemical oxygen demand (BOD)	Not applicable
Chemical oxygen demand (COD)	Not applicable
ThOD	Not applicable
ammonium dihydrogen phosphate (7722-76-1)	
Persistence and degradability	Biodegradability in water: no data available.
ammonium sulfate (7783-20-2)	
Persistence and degradability	Biodegradability in water: no data available.

12.3. Bioaccumulative potential

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Bioaccumulative potential	Not established.
sodium fluoride (7681-49-4)	
BCF fish 1	2.3 (BCF)
Bioaccumulative potential	Not bioaccumulative.
sodium chloride (7647-14-5)	
Log Pow	-3.0 (Calculated)
Bioaccumulative potential	Low bioaccumulation potential (Log Kow < 4).
sodium nitrite (7632-00-0)	
Log Pow	-3.7 (Experimental value; OECD 107: Partition Coefficient (n-octanol/water): Shake Flask Method; 25 °C)
Bioaccumulative potential	Low bioaccumulation potential (Log Kow < 4).
potassium bromide (7758-02-3)	
Bioaccumulative potential	Bioaccumulation: No data available.
sodium nitrate (7631-99-4)	
Log Pow	-3.8
Bioaccumulative potential	Bioaccumulation: Not applicable.
ammonium dihydrogen phosphate (7722-76-1)	
Bioaccumulative potential	Not bioaccumulative.
ammonium sulfate (7783-20-2)	
Log Pow	-5.1
Bioaccumulative potential	Bioaccumulation: Not applicable.

12.4. Mobility in soil

sodium fluoride (7681-49-4)	
Ecology - soil	Toxic to flora.

12.5. Other adverse effects

Effect on the global warming : No known effects from this product.

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GWPmix comment : No known effects from this product.

Other information : Avoid release to the environment.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods : Dispose of contents/container in accordance with licensed collector's sorting instructions.
Waste disposal recommendations : Dispose in a safe manner in accordance with local/national regulations.
Ecology - waste materials : Avoid release to the environment.

SECTION 14: Transport information

Department of Transportation (DOT)

In accordance with DOT

Not regulated

TDG

Not regulated

Transport by sea

Not regulated

Air transport

Not regulated

SECTION 15: Regulatory information

15.1. US Federal regulations

sodium fluoride (7681-49-4)

Listed on the United States TSCA (Toxic Substances Control Act) inventory
Not subject to reporting requirements of the United States SARA Section 313

CERCLA RQ	1000 lb
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sodium chloride (7647-14-5)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

sodium nitrite (7632-00-0)

Listed on the United States TSCA (Toxic Substances Control Act) inventory
Subject to reporting requirements of United States SARA Section 313

CERCLA RQ	100 lb
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potassium bromide (7758-02-3)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

sodium nitrate (7631-99-4)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

ammonium dihydrogen phosphate (7722-76-1)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

ammonium sulfate (7783-20-2)

Listed on the United States TSCA (Toxic Substances Control Act) inventory

15.2. International regulations

CANADA

No additional information available

EU-Regulations

No additional information available

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National regulations

No additional information available

15.3. US State regulations

No additional information available

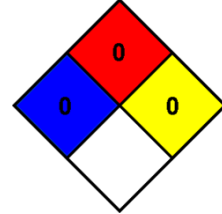
SECTION 16: Other information

Revision date : 08/29/2014
Data sources : REGULATION (EC) No 1272/2008 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL of 16 December 2008 on classification, labeling and packaging of substances and mixtures, amending and repealing Directives 67/548/EEC and 1999/45/EC, and amending Regulation (EC) No 1907/2006.
Other information : None.

Full text of H-phrases:

H272	May intensify fire; oxidizer
H301	Toxic if swallowed
H302	Harmful if swallowed
H315	Causes skin irritation
H319	Causes serious eye irritation
H400	Very toxic to aquatic life
H402	Harmful to aquatic life

NFPA health hazard : 0 - Exposure under fire conditions would offer no hazard beyond that of ordinary combustible materials.
NFPA fire hazard : 0 - Materials that will not burn.
NFPA reactivity : 0 - Normally stable, even under fire exposure conditions, and are not reactive with water.



HMIS III Rating
Health : 0 Minimal Hazard - No significant risk to health
Flammability : 0 Minimal Hazard - Materials that will not burn
Physical : 0 Minimal Hazard - Materials that are normally stable, even under fire conditions, and will NOT react with water, polymerize, decompose, condense, or self-react. Non-Explosives.
Personal protection : C
C - Safety glasses, Gloves, Synthetic apron

SDS US (GHS HazCom 2012)

This information is based on our current knowledge and is intended to describe the product for the purposes of health, safety and environmental requirements only. It should not therefore be construed as guaranteeing any specific property of the product.