

PlasmaCAL custom calibration standard for ICP-AES and ICP-MS

Revision: 05.03.2024

Product code: AC18.09383

Page 1 of 15

1. Identification
Product identifier

PlasmaCAL custom calibration standard for ICP-AES and ICP-MS

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

 Reagents and laboratory chemicals
 Only for laboratory and analysis purposes.

Uses advised against

Do not use for private purposes (household).

Details of the supplier of the safety data sheet
Details of the supplier of the safety data sheet

Company name:	AnalytiChem Services, Unipessoal, Lda
Street:	Rua de Júlio Dinis 676 7º
Place:	P-4050-320 Porto
Telephone:	+351 226002917
E-mail:	info@analytichem.com
Contact person:	SDS service department
E-mail:	SDS@analytichem.com
Internet:	www.analytichem.com
Responsible Department:	SDS service department

Supplier or manufacturer details

Company name:	AnalytiChem Canada Inc.	
	Québec, CANADA	
Street:	21800 Clark Graham Ave	
Place:	CDN-H9X 4B6 Baie-D'Urfé	
Telephone:	+1 (800) 361-6820	Telefax: +1 (800) 253-5549
E-mail:	info@analytichem.com	
Contact person:	SDS service department	
E-mail:	SDS@analytichem.com	
Internet:	www.analytichem.com	
Responsible Department:	AnalytiChem:	
	EU-Belgium: AnalytiChem Belgium, Industriezone "De Arend" 2, 8210 Zedelgem, Belgium, +32 50 28 83 20	
	EU-Germany: AnalytiChem Germany, Stempelstrasse 6, 47167 Duisburg, Germany, +49 203 51 94 – 200	
	EU-Netherlands: AnalytiChem Netherlands, Communicatieweg 7, 3641 SG Mijdrecht, The Netherlands, +31 297 286848	
	UK: AnalytiChem UK, Unit 7 Launton Business Center, Murdock Road, Bicester, OX26 4XB, England, +44 1869 355 500	
	USA: AnalytiChem USA, 227 China Road, Winslow, Maine, 04901, United States, +1 800-244-8378	
	Canada: AnalytiChem Canada, 21800 Clark Graham Avenue, Baie d'Urfe, H9X 4B6, Canada, +1 514-457-0701	
	Australia: ORE Research & Exploration Pty Ltd, 37A Hosie Street, Bayswater North, 3153, Australia, +61 3 9729 0333	
Emergency telephone number:	+1 703-741-5970 (CHEMTREC)	

Further Information

This product is a mixture. REACH Registration Number see section 3.

PlasmaCAL custom calibration standard for ICP-AES and ICP-MS

Revision: 05.03.2024

Product code: AC18.09383

Page 2 of 15

2. Hazard identification

Classification of the substance or mixture

Regulation (EC) No 1272/2008

Met. Corr. 1; H290
 Skin Corr. 1B; H314
 Eye Dam. 1; H318

Full text of hazard statements: see SECTION 16.

Label elements

Regulation (EC) No 1272/2008

Hazard components for labelling

nitric acid

Signal word: Danger

Pictograms:



Hazard statements

H290 May be corrosive to metals.
 H314 Causes severe skin burns and eye damage.
 EUH071 Corrosive to the respiratory tract.

Precautionary statements

P260 Do not breathe dust/fume/gas/mist/vapours/spray.
 P264 Wash hands and face thoroughly after handling.
 P280 Wear protective gloves/protective clothing and eye protection/face protection.
 P303+P361+P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water.
 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/doctor.

Other hazards

No data available

3. Composition/information on ingredients

Mixtures

Chemical characterization

Mixtures in aqueous solution

PlasmaCAL custom calibration standard for ICP-AES and ICP-MS

Revision: 05.03.2024

Product code: AC18.09383

Page 3 of 15

Relevant ingredients

CAS No	Chemical name			Quantity
	EC No	Index No	REACH No	
	Classification (Regulation (EC) No 1272/2008)			
7697-37-2	nitric acid			5 - < 10 %
	231-714-2	007-030-00-3	01-2119487297-23	
	Ox. Liq. 3, Met. Corr. 1, Acute Tox. 3, Skin Corr. 1A, Eye Dam. 1; H272 H290 H331 H314 H318 EUH071			
10043-35-3	boric acid			< 1 %
	233-139-2	005-007-00-2	01-2119486683-25	
	Repr. 1B; H360FD			
10031-43-3	Copper(II) nitrate trihydrate			< 1 %
			01-2119969290-34	
	Ox. Sol. 2, Acute Tox. 4, Skin Irrit. 2, Eye Irrit. 2, Aquatic Acute 1, Aquatic Chronic 1; H272 H302 H315 H319 H400 H410			

Full text of H statements: see section 16.

Specific Conc. Limits, M-factors and ATE

CAS No	EC No	Chemical name	Quantity
	Specific Conc. Limits, M-factors and ATE		
7697-37-2	231-714-2	nitric acid	5 - < 10 %
	inhalation: ATE 2,65 mg/l (vapours) Ox. Liq. 3; H272: >= 65 - 100 Skin Corr. 1A; H314: >= 20 - 100 Skin Corr. 1B; H314: >= 5 - < 20		
10043-35-3	233-139-2	boric acid	< 1 %
	inhalation: LC50 = > 2,12 mg/l (dusts or mists); dermal: LD50 = > 2000 mg/kg; oral: LD50 = 3450 mg/kg		
10031-43-3		Copper(II) nitrate trihydrate	< 1 %
	oral: ATE = 500 mg/kg		

Further Information

No data available

4. First-aid measures
Description of first aid measures
General information

First aider: Pay attention to self-protection!

After inhalation

Provide fresh air.

Call a physician immediately.

After contact with skin

Wash immediately with: Water

Take off immediately all contaminated clothing and wash it before reuse.

Call a physician immediately.

After contact with eyes

In case of contact with eyes flush immediately with plenty of flowing water for 10 to 15 minutes holding eyelids apart and consult an ophthalmologist.

Remove contact lenses, if present and easy to do. Continue rinsing.

Protect uninjured eye.

PlasmaCAL custom calibration standard for ICP-AES and ICP-MS

Revision: 05.03.2024

Product code: AC18.09383

Page 4 of 15

After ingestion

Rinse mouth immediately and drink plenty of water.
 Do NOT induce vomiting. Do not allow a neutralisation agent to be drunk.
 Call a physician immediately.

Most important symptoms and effects, whether acute or delayed

Causes burns.
 Irritant
 Cough
 Dyspnoea
 Vomiting
 Methaemoglobinaemia
 Risk of serious damage to eyes.

Indication of immediate medical attention and special treatment needed

No data available

5. Fire-fighting measures
Extinguishing media
Suitable extinguishing media

Co-ordinate fire-fighting measures to the fire surroundings.

Unsuitable extinguishing media

no restriction

Specific hazards arising from the hazardous product

Non-combustible liquids
 Hazardous combustion products
 In case of fire may be liberated:
 Nitrogen oxides (NO_x)

Special protective equipment and precautions for fire-fighters

In case of fire: Wear self-contained breathing apparatus.
 In case of fire and/or explosion do not breathe fumes.
 Avoid contact with skin, eyes and clothes.

Additional information

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.
 Move undamaged containers from immediate hazard area if it can be done safely.
 Use water spray jet to protect personnel and to cool endangered containers.

6. Accidental release measures
Personal precautions, protective equipment and emergency procedures
General advice

Corrosive to metals.

For non-emergency personnel

Provide adequate ventilation.
 Use personal protection equipment.
 Avoid contact with skin, eyes and clothes.
 Remove persons to safety.
 Emergency procedures
 Consult an expert
 Do not breathe dust/fume/gas/mist/vapours/spray.

For emergency responders

Precautionary statements For emergency responders : Personal protection equipment: see section 8

PlasmaCAL custom calibration standard for ICP-AES and ICP-MS

Revision: 05.03.2024

Product code: AC18.09383

Page 5 of 15

Environmental precautions

Do not allow to enter into surface water or drains.

Methods and material for containment and cleaning up
For containment

Cover drains.

Prevent spread over a wide area (e.g. by containment or oil barriers).

Collect in closed and suitable containers for disposal.

Absorb with liquid-binding material (sand, diatomaceous earth, acid- or universal binding agents).

For cleaning up

Clean contaminated articles and floor according to the environmental legislation.

Other information

Provide adequate ventilation.

Do not breathe dust/fume/gas/mist/vapours/spray.

Wear breathing apparatus if exposed to vapours/dusts/aerosols.

Reference to other sections

Safe handling: see section 7

Personal protection equipment: see section 8

Disposal: see section 13

7. Handling and storage
Precautions for safe handling
Advice on safe handling

Read label before use. Handle and open container with care.

When using do not eat, drink, smoke, sniff. Use personal protection equipment.

Provide adequate ventilation. Avoid contact with skin, eyes and clothes.

Do not breathe vapour/aerosol.

Advice on protection against fire and explosion

Usual measures for fire prevention.

Advice on general occupational hygiene

Keep away from food, drink and animal feedingstuffs. Remove contaminated, saturated clothing immediately.

Draw up and observe skin protection programme. Wash hands and face before breaks and after work and take a shower if necessary. When using do not eat or drink. Avoid: aerosol or mist formation Do not breathe vapour/aerosol.

Further information on handling

Draw up and observe skin protection programme.

Wash hands and face before breaks and after work and take a shower if necessary.

Take off immediately all contaminated clothing and wash it before reuse.

Conditions for safe storage, including any incompatibilities
Requirements for storage rooms and vessels

Corrosive to metals.

Unsuitable container/equipment material: Metal

The product develops hydrogen in an aqueous solution in contact with metals.

Hints on joint storage

Take national regulations into account.

Further information on storage conditions

Keep container tightly closed.

Specific end use(s)

Laboratory chemicals

PlasmaCAL custom calibration standard for ICP-AES and ICP-MS

Revision: 05.03.2024

Product code: AC18.09383

Page 6 of 15

8. Exposure controls/Personal protection
Control parameters
Exposure limits (ACGIH)

CAS No	Chemical name	ppm	mg/m ³	Category	Origin
10043-35-3	Borate compounds, inorganic (inhalable fraction)		2	TWA (8 h)	ACGIH-2025
			6	STEL (15 min)	ACGIH-2025
7697-37-2	Nitric acid	2	5.2	TWA (8 h)	ACGIH-2025
		4	10	STEL (15 min)	ACGIH-2025

DNEL/DMEL values

CAS No	Chemical name	Exposure route	Effect	Value
10043-35-3	boric acid			
Worker DNEL, long-term		inhalation	systemic	8,3 mg/m ³
Worker DNEL, long-term		dermal	systemic	392 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	4,15 mg/m ³
Consumer DNEL, long-term		dermal	systemic	196 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	0,98 mg/kg bw/day
Consumer DNEL, acute		oral	systemic	0,98 mg/kg bw/day

PNEC values

CAS No	Chemical name	Environmental compartment	Value
10043-35-3	boric acid		
Freshwater			2,9 mg/l
Freshwater (intermittent releases)			13,7 mg/l
Marine water			2,9 mg/l
Micro-organisms in sewage treatment plants (STP)			10 mg/l
Soil			5,7 mg/kg
10031-43-3	Copper(II) nitrate trihydrate		
Freshwater			0,0078 mg/l
Marine water			0,0052 mg/l
Freshwater sediment			87 mg/kg
Marine sediment			676 mg/kg
Micro-organisms in sewage treatment plants (STP)			0,23 mg/l
Soil			65 mg/kg

Exposure controls
Appropriate engineering controls

Technical measures and the application of suitable work processes have priority over personal protection equipment.

If handled uncovered, arrangements with local exhaust ventilation have to be used.

PlasmaCAL custom calibration standard for ICP-AES and ICP-MS

Revision: 05.03.2024

Product code: AC18.09383

Page 7 of 15

Individual protection measures, such as personal protective equipment
Eye/face protection

goggles

Wear eye/face protection.

Hand protection

When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits. The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances. For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves.

Skin protection

Wear suitable protective clothing. Take off immediately all contaminated clothing.

Wash hands before breaks and after work.

The choice of body protection depends on the concentration and quantity of hazardous substances. The chemical resistance of protective agents must be clarified with their suppliers.

Respiratory protection

Respiratory protection necessary at: aerosol or mist formation

The entrepreneur has to ensure that maintenance, cleaning and testing of respiratory protective devices are carried out according to the instructions of the producer. These measures have to be properly documented.

Thermal hazards

No data available

Environmental exposure controls

Do not allow to enter into surface water or drains.

9. Physical and chemical properties
Information on basic physical and chemical properties

Physical state:	Liquid	
Colour:	clear	
Odour:	like: Nitric acid	
Odour threshold:	No data available	
Melting point/freezing point:		No data available
Boiling point or initial boiling point and boiling range:		No data available
Flammability:		No data available
Lower explosive limits:		No data available
Upper explosive limits:		No data available
Flash point:		No data available
Auto-ignition temperature:		No data available
Decomposition temperature:		No data available
pH-Value (at 20 °C):		<2
Viscosity / kinematic:		No data available
Water solubility:		completely miscible
Solubility in other solvents		
No data available		
Dissolution rate:		No data available
Partition coefficient n-octanol/water:		No data available
Dispersion stability:		No data available
Vapour pressure:		No data available
Vapour pressure:		No data available
Density (at 22 °C):		1,029 g/cm ³

PlasmaCAL custom calibration standard for ICP-AES and ICP-MS

Revision: 05.03.2024

Product code: AC18.09383

Page 8 of 15

Relative density:	No data available
Bulk density:	No data available
Relative vapour density:	No data available
Particle characteristics:	No data available

Other information

Information with regard to physical hazard classes

Explosive properties	No data available
No data available	
Sustained combustibility:	No data available
Self-ignition temperature	
Solid:	No data available
Gas:	No data available
Oxidizing properties	
Oxidizing	

Other safety characteristics

Evaporation rate:	No data available
Solvent separation test:	No data available
Solvent content:	0
Solid content:	0
Sublimation point:	No data available
Softening point:	No data available
Pour point:	No data available
No data available:	
Viscosity / dynamic:	No data available
Flow time:	No data available

Further Information

Corrosive to metals.

10. Stability and reactivity

Reactivity

Corrosive to metals.
Oxidising agent

Chemical stability

The product is stable under storage at normal ambient temperatures.

Possibility of hazardous reactions

Alkali (lye)
The product develops hydrogen in an aqueous solution in contact with metals.
Amines, Ammonia, Alcohols, Alkali metals, Hydrogen peroxide
Copper, Combustible solids, Solvent, Alkaline earth metal, mercury (Hg).

Conditions to avoid

No data available

Incompatible materials

Cellulose
Metal
The product develops hydrogen in an aqueous solution in contact with metals.

Hazardous decomposition products

In case of fire may be liberated:
SECTION 5: Firefighting measures

PlasmaCAL custom calibration standard for ICP-AES and ICP-MS

Revision: 05.03.2024

Product code: AC18.09383

Page 9 of 15

Further information

No data available

11. Toxicological information
Information on toxicological effects
Toxicokinetics, metabolism and distribution

There are no data available on the mixture itself.

Acute toxicity

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

ATEmix calculated

ATE (oral) > 2000 mg/kg; ATE (dermal) > 2000 mg/kg; ATE (inhalation vapour) > 20 mg/l; ATE (inhalation dust/mist) > 5 mg/l

CAS No	Chemical name				
	Route of exposure	Dose	Species	Source	Method
7697-37-2	nitric acid				
	inhalation vapour	ATE 2,65 mg/l			
10043-35-3	boric acid				
	oral	LD50 3450 mg/kg	Rat	Toxicology and Applied Pharmacology 23:	other: No data
	dermal	LD50 > 2000 mg/kg	Rabbit	Study report (1982)	other: FIFRA
	inhalation (4 h) dust/mist	LC50 > 2,12 mg/l	Rat	Study report (1997)	OECD Guideline 403
10031-43-3	Copper(II) nitrate trihydrate				
	oral	ATE 500 mg/kg			

Irritation and corrosivity

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

Serious eye damage/eye irritation: Causes serious eye damage.

Corrosive to the respiratory tract.

Following ingestion Gastric perforation

Irritating to respiratory system.

Pulmonary oedema

Mucous membrane irritation in the mouth, throat, esophagus and gastrointestinal tract.

see also Section 4

Sensitizing effects

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

Carcinogenic/mutagenic/toxic effects for reproduction

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

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

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

STOT-single exposure

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

STOT-repeated exposure

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

PlasmaCAL custom calibration standard for ICP-AES and ICP-MS

Revision: 05.03.2024

Product code: AC18.09383

Page 10 of 15

Aspiration hazard

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

Information on likely routes of exposure

There are no data available on the mixture itself.

Specific effects in experiment on an animal

There are no data available on the mixture itself.

Additional information on tests

There are no data available on the mixture itself.

Practical experience

There are no data available on the mixture itself.

Information on other hazards

Endocrine disrupting properties

There are no data available on the mixture itself.

Other information

There are no data available on the mixture itself.

Further information

There are no data available on the mixture itself.

12. Ecological information

Ecotoxicity

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

PlasmaCAL custom calibration standard for ICP-AES and ICP-MS

Revision: 05.03.2024

Product code: AC18.09383

Page 11 of 15

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h] [d]	Species	Source	Method
7697-37-2	nitric acid					
	Acute fish toxicity	LC50 mg/l	1559	96 h	Topeka shiner	Environmental Toxicology and Chemistry, other: ASTM E729-26
	Fish toxicity	NOEC	268 mg/l	30 d	juvenile Topeka shiner and with juvenile Fathead m	Study report (2009) Growth tests estimated the test chemical
	Algae toxicity	NOEC	> 419 mg/l	10 d	several benthic diatoms; see results	Marine Biology 43:307-315 (1977) Ten cultures of benthic diatoms were iso
	Acute bacteria toxicity	EC50	> 1000 mg/l ()	3 h	Activated sludge	Study report (2008) OECD Guideline 209
10043-35-3	boric acid					
	Acute fish toxicity	LC50	79,7 mg/l	96 h	Pimephales promelas	Study report (2010) other: ASTM E729-95 Standard Guide for C
	Acute algae toxicity	ErC50	66 mg/l	72 h	Phaeodactylum tricorutum	Study report (2011) ISO 10253
	Acute crustacea toxicity	EC50	109 mg/l	48 h	Ceriodaphnia dubia	Study report (2010) other: ASTM E729-95 Standard Guide for C
	Fish toxicity	NOEC	11,2 mg/l	32 d	Pimephales promelas	Study report (2010) other: ASTM E1241-05 Standard Guide for
	Algae toxicity	NOEC	17,5 mg/l	3 d	Pseudokirchneriella subcapitata	Study report (2000) OECD Guideline 201
	Crustacea toxicity	NOEC	25,9 mg/l	42 d	other aquatic crustacea: Hyalella azteca	Study report (2010) other: US EPA 2000 Methods for assessing
	Acute bacteria toxicity	EC50	> 10000 mg/l ()	3 h	activated sludge of a predominantly domestic sewage	Study report (2001) OECD Guideline 209
10031-43-3	Copper(II) nitrate trihydrate					
	Acute fish toxicity	LC50	0,193 mg/l	96 h	Pimephales promelas	Study report (1996) measurements were conducted by standard
	Acute algae toxicity	ErC50	0,152 mg/l	72 h	Pseudokirchneriella subcapitata	Publication (2005) OECD Guideline 201
	Acute crustacea toxicity	EC50	0,007 mg/l	48 h	Daphnia magna	Study report (1978) - Test were conducted on Daphnia magna t
	Fish toxicity	NOEC	0,123 mg/l	12 d	Atherinops affinis	Mar. Environ. Res. 31: 17-35 (1991) Three tests are reported, designed to de

PlasmaCAL custom calibration standard for ICP-AES and ICP-MS

Revision: 05.03.2024

Product code: AC18.09383

Page 12 of 15

	Algae toxicity	NOEC mg/l	0,0102	19 d	other aquatic plant: giant kelp <i>Macrocystis</i> <i>pyrife</i>	Mar. Ecol. Prog. Ser. 68: 147 - 156 (199)	Tests were conducted to determine the ef
	Crustacea toxicity	NOEC mg/l	0,033	14 d	<i>Penaeus</i> <i>mergulensis</i> and <i>Penaeus monodon</i>	Bull. Environ. Contain. Toxicol. (1995)	The effects of dissolved copper on the g

Persistence and degradability

The methods for determining the biological degradability are not applicable to inorganic substances.

Bioaccumulative potential

There are no data available on the mixture itself.

Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
10043-35-3	boric acid	-1,09

BCF

CAS No	Chemical name	BCF	Species	Source
10043-35-3	boric acid	0,558	<i>Oncorhynchus nerka</i>	Water Research Vol.
10031-43-3	Copper(II) nitrate trihydrate	0,02 - 20	<i>Crangon crangon</i>	Symp. Biologica. Hun

Mobility in soil

There are no data available on the mixture itself.

Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

Endocrine disrupting properties

This product does not contain a substance that has endocrine disrupting properties with respect to non-target organisms as no components meets the criteria.

Other adverse effects

- Discharge into the environment must be avoided.
- Harmful effect due to pH shift.
- Forms corrosive mixtures with water even if diluted.

Further information

Do not allow to enter into surface water or drains.

13. Disposal considerations
Waste treatment methods
Disposal recommendations

- Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste.
- Send to a physico-chemical treatment facility under observation of official regulations.
- Do not empty into drains.

Contaminated packaging

- Handle contaminated packages in the same way as the substance itself.
- Waste codes/waste designations according to EWC/AVV

14. Transport information
Land transport (ADR/RID)

<u>UN number or ID number:</u>	UN 3264
<u>United Nations proper shipping name:</u>	CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (nitric acid)
<u>Transport hazard class(es):</u>	8

PlasmaCAL custom calibration standard for ICP-AES and ICP-MS

Revision: 05.03.2024

Product code: AC18.09383

Page 13 of 15

Packing group: III
 Hazard label: 8
 Classification Code: C1
 Special Provisions: 274
 Limited quantity: 5 L
 Excepted quantity: E1
 Transport category: 3
 Hazard No: 80
 Tunnel restriction code: E

Inland waterways transport (ADN)

UN number or ID number: UN 3264
United Nations proper shipping name: CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (nitric acid)
Transport hazard class(es): 8
Packing group: III
 Hazard label: 8
 Classification Code: C1
 Special Provisions: 274
 Limited quantity: 5 L
 Excepted quantity: E1

Marine transport (IMDG)

UN number or ID number: UN 3264
United Nations proper shipping name: CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (nitric acid)
Transport hazard class(es): 8
Packing group: III
 Hazard label: 8
 Special Provisions: 223 274
 Limited quantity: 5 L
 Excepted quantity: E1
 EmS: F-A, S-B
 Segregation group: 1 - acids

Air transport (ICAO-TI/IATA-DGR)

UN number or ID number: UN 3264
United Nations proper shipping name: CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (nitric acid)
Transport hazard class(es): 8
Packing group: III
 Hazard label: 8
 Special Provisions: A3 A803
 Limited quantity Passenger: 1 L
 Passenger LQ: Y841
 Excepted quantity: E1
 IATA-packing instructions - Passenger: 852
 IATA-max. quantity - Passenger: 5 L
 IATA-packing instructions - Cargo: 856
 IATA-max. quantity - Cargo: 60 L

Environmental hazards

ENVIRONMENTALLY HAZARDOUS: No

15. Regulatory information

PlasmaCAL custom calibration standard for ICP-AES and ICP-MS

Revision: 05.03.2024

Product code: AC18.09383

Page 14 of 15

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

EU Regulatory information

Authorisations (REACH, annex XIV):

Substances of very high concern, SVHC (REACH, article 59):
boric acid

Restrictions on use (REACH, annex XVII):

Entry 3, Entry 30, Entry 75

Marketing and use of explosives precursors:

Acquisition, introduction, possession or use of this product by the general public is restricted by Regulation (EU) 2019/1148. All suspicious transactions, and significant disappearances and thefts should be reported to the relevant national contact point.

National regulatory information

Employment restrictions:

Observe employment restrictions for young people.

Water hazard class (D):

1 - slightly hazardous to water

16. Other information

Abbreviations and acronyms

- Ox. Liq. 3: Oxidizing liquids
- Ox. Sol. 2: Oxidizing solids
- Met. Corr. 1: Corrosive to metals
- Acute Tox. 3: Acute toxicity
- Acute Tox. 4: Acute toxicity
- Skin Corr. 1A: Skin corrosion
- Skin Corr. 1B: Skin corrosion
- Skin Irrit. 2: Skin irritation
- Eye Dam. 1: Serious eye damage
- Eye Irrit. 2: Eye irritation
- Repr. 1B: Reproductive toxicity
- Aquatic Acute 1: Acute aquatic hazard
- Aquatic Chronic 1: Chronic aquatic hazard

Classification for mixtures and used evaluation method according to regulation (EC) No 1272/2008

Classification	Classification procedure
Met. Corr. 1; H290	On basis of test data
Skin Corr. 1B; H314	Calculation method
Eye Dam. 1; H318	Calculation method

Relevant H statements (number and full text)

- H272 May intensify fire; oxidizer.
- H290 May be corrosive to metals.
- H302 Harmful if swallowed.
- H314 Causes severe skin burns and eye damage.
- H315 Causes skin irritation.
- H318 Causes serious eye damage.
- H319 Causes serious eye irritation.
- H331 Toxic if inhaled.
- H360FD May damage fertility. May damage the unborn child.
- H400 Very toxic to aquatic life.
- H410 Very toxic to aquatic life with long lasting effects.
- EUH071 Corrosive to the respiratory tract.

PlasmaCAL custom calibration standard for ICP-AES and ICP-MS

Revision: 05.03.2024

Product code: AC18.09383

Page 15 of 15

Further Information

Provide appropriate information, instructions and training to users

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights.

The receiver of our product is singularly responsible for adhering to existing laws and regulations.

(The data for the relevant ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)