Safety Data Sheet

According to Regulation (EC) No. 1272/2008 (CLP), as amended by Commission Regulation (EU) 2019/521 and Commission Delegated Regulation (EU) 2020/217, and (EC) No. 1907/2006 (REACH), as amended by Commission Regulation (EU) 2020/878.

Calcium-Arsenazo III

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

1.1 Product identifier

Product Name: Calcium-Arsenazo III
Product code: C7529

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

Relevant identified uses: For the quantitative determination of calcium in serum.
Uses advised against: Not determined or not applicable.
Reasons why uses advised against: Not determined or not applicable.

1.3 Details of the manufacturer/supplier of the safety data sheet

Manufacturer:
United States
HORIBA Instruments Incorporated
5449 Research Drive
Canton, MI 48188
734-487-8300
horiba.com

1.4 Emergency telephone number:

United States
HORIBA Instruments Incorporated
1-800-445-9853 (24 hours per day)

France
Organisme de conseil/centre antipoison national
+33 1 45 42 59 59 (24 hours per day)

Portugal
Órgão consultor nacional/Centro Antivenenos
+351 800 250 250 (24 hours per day)

Spain
Centro de información toxicológica/organismo asesor nacional
+34 91 562 04 20 (24 hours per day)

Czech Republic
Národní poradní orgán/toxikologické středisko
+420 224 919 293 (24 hours per day)

Greece
Εθνικό συμβουλευτικό όργανο/Κέντρο Δηλητηριάσεων
+30 210 779 3777 (24 hours per day)

Italy
Organismo ufficiale di consultazione nazionale/Centro antiveleni
+39 06 305 4343 (24 hours per day)

Romania
Organism consultativ naţional/Centru pentru otrăviri
+40 21 3183606 (24 hours per day)

Poland
Krajowa instytucja doradcza/Ośrodek zatruć
+48 22 619 66 54 (24 hours per day)

SECTION 2: Hazard(s) identification

2.1 Classification of the substance or mixture:

Classification according to Regulation (EC) No. 1272/2008 (CLP):
Reproductive toxicity, category 1B

Hazard-determining components of labeling:
Boric acid
2,7-(bis(2-arsonophenylazo))-1,8-dihydroxynaphthalene-3,6-disulphonic acid

Additional Information: None

2.2 Label elements

Labelling according to Regulation (EC) No 1272/2008 (CLP)

Hazard pictograms:

Signal Word: Danger

Hazard statements:
H361 Suspected of damaging fertility or the unborn child.

Precautionary statements:
P201 Obtain special instructions before use
P202 Do not handle until all safety precautions have been read and understood
P280 Wear protective gloves, protective clothing, eye protection and face protection.
P308+P313 If exposed or concerned: Get medical advice/attention.
P405 Store locked up
P501 Dispose of contents in accordance with local regulations.

2.3 Other hazards: None known

SECTION 3: Composition/information on ingredients

3.1 Substance: Not applicable.

3.2 Mixture:

Identification	EU REACH Registration No.	Name	Classification according to Regulation (EC) No. 1272/2008 (CLP)	Weight %
CAS number: 10043-35-3 EC number: 233-139-2	–	Boric acid	Repr. 1B; H360	0.31

CAS number: 1668-00-4 EC number: 216-788-6	–	2,7-(bis(2-arsonophenylazo))-1,8-dihydroxynaphthalene-3,6-disulphonic acid	Acute Tox. 3 (Oral); H301 Acute Tox. 3 (Inh); H331 Aquatic Acute 1; H400 Aquatic Chronic 1; H410 Acute Toxicity Estimate: Oral ATE: 100 mg/kg Inhalation ATE: 0.5 mg/L	0.01

Additional information: None
Full Text of H and EUH statements: See section 16

SECTION 4: First aid measures

4.1 Description of first aid measures

General notes:

Show this Safety Data Sheet to the doctor in attendance.

Following inhalation:

If inhaled, remove person to fresh air and place in a position comfortable for breathing. Keep person at rest. If breathing is difficult, administer oxygen. If breathing has stopped, provide artificial respiration. If symptoms develop or persist, seek medical advice/attention.

Following skin contact:

Remove contaminated clothing and shoes. Rinse skin with copious amounts of water [shower] for several minutes. Launder contaminated clothing before reuse. If symptoms develop or persist, seek medical advice/attention.

Following eye contact:

Rinse eyes with plenty of water for several minutes. Remove contact lenses if present and easy to do so. Protect unexposed eye. If symptoms develop or persist, seek medical advice/attention.

Following ingestion:

If swallowed, DO NOT induce vomiting unless told to do so by a physician or poison control center. Rinse mouth with water. Never give anything by mouth to an unconscious person. If spontaneous vomiting occurs, place on the left side with head down to prevent aspiration of liquid into the lungs. If symptoms develop or persist, seek medical advice/attention.

Self-Protection of the first aider:

Not determined or not available.

4.2 Most important symptoms and effects, both acute and delayed

Acute symptoms and effects: Not determined or not available.

Delayed symptoms and effects:

Long term exposure may affect fertility. Symptoms include, but are not limited to: menstrual problems, altered sexual behavior/fertility/ and pregnancy outcome. Long term exposure may also affect development of the unborn child. Symptoms include, but are not limited to: intrauterine growth retardation, pre-term birth, birth defects and postnatal death.

4.3 Indication of any immediate medical attention and special treatment needed

Specific treatment:

Not determined or not available.

Notes for the doctor:
Treat symptomatically.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media:
Water mist/fog, carbon dioxide, dry chemical or alcohol resistant foam.

Unsuitable extinguishing media:
Do not use water jet.

5.2 Special hazards arising from the substance or mixture:

Thermal decomposition may produce irritating/toxic fumes/gases.

5.3 Advice for firefighters

Personal protection equipment:
Fire-fighters should wear appropriate protective equipment and self-contained breathing apparatus (SCBA) with a full-face piece operated in positive pressure mode.

Special precautions:
Avoid contact with skin, eyes, hair and clothing. Do not breathe fumes/gas/mists/aerosols/vapors/dusts. Move containers from fire area if safe to do so. Use water spray/fog for cooling fire exposed containers. Avoid unnecessary run-off of extinguishing media which may cause pollution.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures:

Evacuate unnecessary personnel. Ventilate area. Extinguish any sources of ignition. Wear recommended personal protective equipment (see Section 8). Avoid contact with skin, eyes and clothing. Avoid breathing mist, vapor, dust, fume and spray. Do not walk through spilled material. Wash thoroughly after handling.

6.2 Environmental precautions:

Prevent further leakage or spillage if safe to do so. Prevent from reaching drains, sewers and waterways. Discharge into the environment must be avoided.

6.3 Methods and material for containment and cleaning up:

Do not touch damaged containers or spilled material unless wearing appropriate personal protective clothing. Stop leak if you can do it without risk. Contain and collect spillage and place in suitable container for future disposal. Dispose of in accordance with all applicable regulations (see Section 13).

6.4 Reference to other sections:

For personal protective equipment see Section 8. For disposal see Section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling:

Use appropriate personal protective equipment (see Section 8). Use only with adequate ventilation. Avoid breathing mist/vapor/spray/dust. Do not eat, drink, smoke, or use personal products when handling chemical substances. Avoid contact with skin, eyes and clothing. Wash affected areas thoroughly after handling. Keep away from incompatible materials (See Section 10). Keep containers tightly closed when not in use.

7.2 Conditions for safe storage, including any incompatibilities:

Store in cool, dry, well-ventilated location out of direct sunlight. Keep away from food and beverages. Protect from freezing and physical damage. Store away from heat, open flames and other sources of ignition. Keep container tightly sealed. Store away from incompatible materials (See Section 10). Store at room temperature.

7.3 Specific end use(s):

Refer to Section 1 (Recommended Use).

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Only those substances with limit values have been included below.

Occupational Exposure limit values:

Country (Legal Basis)	Substance	Identifier	Permissible concentration
Germany (TRGS 900)	Boric acid	10043-35-3	8-Hour TWA: 0.5 mg/m³ (inhalable fraction)
	Boric acid	10043-35-3	15-Minute STEL: 1 mg/m³ (inhalable fraction)
	2,7-(bis(2-arsonophenylazo))-1,8-dihydroxynaphthalene-3,6-disulphonic acid	1668-00-4	8-Hour TWA: 0.0083 mg/m³ (Arsenic and its compounds, as As, inhalable fraction)
	2,7-(bis(2-arsonophenylazo))-1,8-dihydroxynaphthalene-3,6-disulphonic acid	1668-00-4	15-Minute STEL: 0.066 mg/m³ (Arsenic and its compounds, as As, inhalable fraction)
Latvia	Boric acid	10043-35-3	8-Hour TWA: 10 mg/m³
	2,7-(bis(2-arsonophenylazo))-1,8-dihydroxynaphthalene-3,6-disulphonic acid	1668-00-4	8-Hour TWA: 0.01 mg/m³ (Arsenic acid and its salts and inorganic arsenic compounds, inhalable fraction)
Lithuania	Boric acid	10043-35-3	8-Hour TWA: 10 mg/m³
Belgium	Boric acid	10043-35-3	8-Hour TWA: 2 mg/m³ (Borate, inorganic compounds)
	Boric acid	10043-35-3	15-Minute STEL: 6 mg/m³ (Borate, inorganic compounds)
Finland	Boric acid	10043-35-3	8-Hour TWA: 0.5 mg/m³ (Borates, as B)
	2,7-(bis(2-arsonophenylazo))-1,8-dihydroxynaphthalene-3,6-disulphonic acid	1668-00-4	8-Hour TWA: 0.01 mg/m³ (Arsenic acid and its salts, as As)
Ireland	Boric acid	10043-35-3	8-Hour TWA: 2 mg/m³ (Borate compounds, inorganic, inhalable fraction)
Italy	Boric acid	10043-35-3	15-Minute STEL: 6 mg/m³ (Borate compounds, inorganic, inhalable fraction)
	Boric acid	10043-35-3	8-Hour TWA: 2 mg/m³ (Borate compounds, inorganic, inhalable fraction)
	2,7-(bis(2-arsonophenylazo))-1,8-dihydroxynaphthalene-3,6-disulphonic acid	1668-00-4	8-Hour TWA: 0.01 mg/m³ (Arsenic and its salts and inorganic compounds, inhalable fraction)
Portugal	Boric acid	10043-35-3	8-Hour TWA: 2 mg/m³ (Borate compounds, inorganic, inhalable fraction)

Country (Legal Basis)	Substance	Identifier	Permissible concentration
	Boric acid	10043-35-3	STEL: 6 mg/m³ (Borate compounds, inorganic, inhalable fraction)
	2,7-(bis(2-arsonophenylazo))-1,8-dihydroxynaphthalene-3,6-disulphonic acid	1668-00-4	8-Hour TWA: 0.01 mg/m³ (Salts of arsenic acid, inhalable fraction)
Spain	Boric acid	10043-35-3	8-Hour TWA: 2 mg/m³
	Boric acid	10043-35-3	15-Minute STEL: 6 mg/m³
	2,7-(bis(2-arsonophenylazo))-1,8-dihydroxynaphthalene-3,6-disulphonic acid	1668-00-4	8-Hour TWA: 0.01 mg/m³ (Arsenic acid and its salts, as As)
Germany (MAK)	Boric acid	10043-35-3	8-Hour TWA: 10 mg/m³ (inhalable fraction)
	Boric acid	10043-35-3	15-Minute STEL: 10 mg/m³ (inhalable fraction)
Slovenia	Boric acid	10043-35-3	8-Hour TWA: 0.5 mg/m³ (inhalable fraction)
	Boric acid	10043-35-3	15-Minute STEL: 1 mg/m³ (inhalable fraction)
	2,7-(bis(2-arsonophenylazo))-1,8-dihydroxynaphthalene-3,6-disulphonic acid	1668-00-4	8-Hour TWA: 0.01 mg/m³ (Arsenic acid and its salts, inhalable fraction)
Romania	2,7-(bis(2-arsonophenylazo))-1,8-dihydroxynaphthalene-3,6-disulphonic acid	1668-00-4	8-Hour TWA: 0.01 mg/m³ (Arsenic acid and its salts, inhalable fraction)
Slovakia	2,7-(bis(2-arsonophenylazo))-1,8-dihydroxynaphthalene-3,6-disulphonic acid	1668-00-4	8-Hour TWA: 0.01 mg/m³ (Salts of Arsenic acid, inhalable fraction)
European Union	2,7-(bis(2-arsonophenylazo))-1,8-dihydroxynaphthalene-3,6-disulphonic acid	1668-00-4	8-Hour TWA: 0.01 mg/m³ (Salts of arsenic acid)
Austria	2,7-(bis(2-arsonophenylazo))-1,8-dihydroxynaphthalene-3,6-disulphonic acid	1668-00-4	8-Hour TWA: 0.1 mg/m³ (Arsenic and its compounds, inhalable fraction)
	2,7-(bis(2-arsonophenylazo))-1,8-dihydroxynaphthalene-3,6-disulphonic acid	1668-00-4	STEL: 0.4 mg/m³ (Arsenic and its compounds, inhalable fraction)
Greece	2,7-(bis(2-arsonophenylazo))-1,8-dihydroxynaphthalene-3,6-disulphonic acid	1668-00-4	8-Hour TWA: 0.1 mg/m³ (Arsenic and its compounds, as As)
Luxembourg	2,7-(bis(2-arsonophenylazo))-1,8-dihydroxynaphthalene-3,6-disulphonic acid	1668-00-4	8-Hour TWA: 0.01 mg/m³ (Salts of arsenic acid, inhalable fraction)
The Netherlands	2,7-(bis(2-arsonophenylazo))-1,8-dihydroxynaphthalene-3,6-disulphonic acid	1668-00-4	8-Hour TWA: 0.0028 mg/m³ (Arsenic acid water-insoluble salts, as As)
United Kingdom	2,7-(bis(2-arsonophenylazo))-1,8-dihydroxynaphthalene-3,6-disulphonic acid	1668-00-4	8-Hour TWA: 0.1 mg/m³ (Arsenic and compounds, as As)

Biological limit values:

Country (Legal Basis)	Substance	Identifier	Determinant	Specimen	Sampling time	Permissible limits
Hungary	2,7-(bis(2-arsonophenylazo))-1,8-dihydroxynaphthalene-3,6-disulphonic acid	1668-00-4	Arsenic	Urine	End of shift	0.05 mg/l [0.67 µmol/l]
Austria	2,7-(bis(2-arsonophenylazo))-1,8-dihydroxynaphthalene-3,6-disulphonic acid	1668-00-4	Arsenic	Urine	1 YR	50 µg/l
France	2,7-(bis(2-arsonophenylazo))-1,8-dihydroxynaphthalene-3,6-disulphonic acid	1668-00-4	Inorganic arsenic metabolites	Creatinine in urine	End of week	0.05 mg/g

Derived No Effect Level (DNEL):
Ingredient Name: Boric acid
CAS #: 10043-35-3

Workers - Systemic Effects	Acute - Oral	Not determined or not applicable.
	Acute - Inhalation	No hazard identified
	Acute - Dermal	No hazard identified
	Chronic - Oral	Not determined or not applicable.
	Chronic - Inhalation	8.3 mg/m³
	Chronic - Dermal	392 mg/kg bw/day
Workers - Local Effects	Acute - Oral	Not determined or not applicable.
	Acute - Inhalation	No hazard identified
	Acute - Dermal	No hazard identified
	Chronic - Oral	Not determined or not applicable.
	Chronic - Inhalation	No hazard identified
	Chronic - Dermal	No hazard identified
General Population - Systemic Effects	Acute - Oral	0.98 mg/kg bw/day
	Acute - Inhalation	No hazard identified
	Acute - Dermal	No hazard identified
	Chronic - Oral	0.98 mg/kg bw/day
	Chronic - Inhalation	4.15 mg/m³
	Chronic - Dermal	196 mg/kg bw/day
General Population - Local Effect	Acute - Oral	Not determined or not applicable.
	Acute - Inhalation	No hazard identified
	Acute - Dermal	No hazard identified
	Chronic - Oral	Not determined or not applicable.
	Chronic - Inhalation	No hazard identified
	Chronic - Dermal	No hazard identified

Predicted No Effect Concentration (PNEC):
Ingredient Name: Boric acid
CAS #: 10043-35-3

Environmental Protection Target	PNEC

Fresh water	2.9 mg/L
Freshwater sediments	No exposure expected
Marine water	2.9 mg/L
Marine sediments	No exposure expected
Microorganisms in sewage treatment	10 mg/L
Soil (agricultural)	5.7 mg/kg soil dw
Air	No hazard identified
Oral (Secondary Poisoning)	No exposure expected

Information on monitoring procedures:

Not determined or not applicable.

8.2 Exposure controls

Appropriate engineering controls:

Emergency eye wash stations and safety showers should be available in the immediate vicinity of use or handling. Provide adequate ventilation to maintain the airborne concentrations of vapor, mists, and/or dusts below the applicable workplace exposure limits, while observing recognized national standards (or equivalent).

Personal protection equipment

Eye and face protection:

Safety glasses or goggles. Use eye protection equipment that has been tested and approved by recognized national standards (or equivalent).

Skin and body protection:

Chemical resistant, impervious gloves approved by the appropriate standards. Gloves must be inspected prior to use. Avoid skin contact with used gloves. Appropriate techniques should be used to remove used gloves and contaminated clothing. 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. Ensure that all personal protective equipment is approved by recognized national standards (or equivalent).

Respiratory protection:

If engineering controls do not maintain airborne concentrations below the applicable workplace exposure limits, or to an acceptable level (if exposure limits have not been established), a respirator approved by recognized national standards (or equivalent) must be worn.

General hygienic measures:

When handling chemical products, do not eat, drink or smoke. Wash hands after handling, before breaks, and at the end of the workday. Avoid contact with skin, eyes and clothing. Wash contaminated clothing before reuse. Perform routine housekeeping.

Environmental exposure controls:

Emissions from ventilation or work process equipment should be checked to ensure they comply with the requirements of environmental protection legislation.

Product (substance / mixture) related measures to prevent exposure:	Not determined or not applicable.
Instruction measures to prevent exposure:	Not determined or not applicable.
Organisational measures to prevent exposure:	Not determined or not applicable.
Technical measures to prevent exposure:	Not determined or not applicable.

Risk management measures to control exposure:

Not determined or not applicable.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical State	Reagent is provided as a liquid.
Color	Reagent is dark purple in color.
Odor/Odor threshold	Not Available
pH	Reagent = 8.50
Melting point/freezing point	Not Available
Initial boiling point/range	Not Available
Flash point (closed cup)	Not Available
Flammability	Not Available
Upper flammability/explosive limit	Not Available
Lower flammability/explosive limit	Not Available
Vapor pressure	Not determined or not available.
Relative vapor density	Not Available
Density	Not Available
Relative density	Not determined or not available.
Solubilities	Not Available
Partition coefficient (n-octanol/water)	Not Available
Auto/Self-ignition temperature	Not Available
Decomposition temperature	Not determined or not available.
Kinematic viscosity	Not determined or not available.
Particle characteristics	Not determined or not available.

9.2 Other information

9.2.1 Information with regard to physical hazard classes

Explosives	No data available/Not applicable
Flammable gases	No data available/Not applicable
Aerosols	No data available/Not applicable
Oxidizing gases	No data available/Not applicable
Gases under pressure	No data available/Not applicable
Flammable liquids	No data available/Not applicable
Flammable solids	No data available/Not applicable
Self-reactive substances and mixtures	No data available/Not applicable
Pyrophoric liquids	No data available/Not applicable
Pyrophoric solids	No data available/Not applicable
Self-heating substances and mixtures	No data available/Not applicable
Substances and mixtures, which emit flammable gases in contact with water	No data available/Not applicable
Oxidizing liquids	No data available/Not applicable
Oxidizing solids	No data available/Not applicable
Organic peroxides	No data available/Not applicable
Corrosive to metals	No data available/Not applicable
Desensitized explosives	No data available/Not applicable

9.2.2 Other safety characteristics
None.

SECTION 10: Stability and reactivity

10.1 Reactivity:
Not reactive under recommended handling and storage conditions.

10.2 Chemical stability:
Stable under recommended handling and storage conditions.

10.3 Possibility of hazardous reactions:
Hazardous reactions are not anticipated under recommended conditions of handling and storage.

10.4 Conditions to avoid:
Extreme heat, open flames, hot surfaces, sparks, ignition sources and incompatible materials.

10.5 Incompatible materials:
None known.

10.6 Hazardous decomposition products:
Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

Acute toxicity

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

Product data: No data available.

Substance data:

Name	Route	Result
Boric acid	oral	LD50 Rat: 2660 mg/kg
	dermal	LD50 Rabbit: >2000 mg/kg
2,7-(bis(2-arsonophenylazo))-1,8-dihydroxynaphthalene-3,6-disulphonic acid	Oral ATE	LD50 Rat: 100 mg/kg
	Inhalation ATE	LC50 Rat: 0.5 mg/L (4 hr [dust/mist])

Skin corrosion/irritation

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

Product data:
No data available.

Substance data: No data available.

Serious eye damage/irritation

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

Product data:
No data available.

Substance data: No data available.

Respiratory or skin sensitization

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

Product data:
No data available.

Substance data: No data available.

Carcinogenicity

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

Product data: No data available.

Substance data: No data available.

International Agency for Research on Cancer (IARC):

Name	Classification
Boric acid	Not Applicable
2,7-(bis(2-arsonophenylazo))-1,8-dihydroxynaphthalene-3,6-disulphonic acid	Not Applicable

Germ cell mutagenicity

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

Product data: No data available.

Substance data: No data available.

Reproductive Toxicity

Assessment:

May damage fertility or the unborn child.

Product data:

No data available.

Substance data:

Name	Result
Boric acid	May damage fertility or the unborn child.

Specific target organ toxicity (single exposure)

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

Product data:

No data available.

Substance data: No data available.

Specific target organ toxicity (repeated exposure)

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

Product data:

No data available.

Substance data: No data available.

Aspiration toxicity

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

Product data:

No data available.

Substance data: No data available.

Information on likely routes of exposure:

No data available.

Symptoms related to the physical, chemical and toxicological characteristics:

No data available.

11.2 Information on other hazards

Endocrine disrupting properties:

Substance data: No data available.

Other information:

No data available.

SECTION 12: Ecological information

12.1 Toxicity

Acute (short-term) toxicity

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

Product data: No data available.

Substance data:

Name	Result
Boric acid	Fish LC50 Pimephales promelas: 79.7 mg/L (96 hr)
	Aquatic Plants EC50 Freshwater algae: 66 mg/L (72 hr [growth rate])
	Aquatic Invertebrates LC50 Daphnia magna: 102 mg/L (48 hr)
2,7-(bis(2-arsonophenylazo))-1,8-dihydroxynaphthalene-3,6-disulphonic acid	Fish LC50 Pimephales promelas: 12.6 mg/L (96 hr [as As])
	Aquatic Invertebrates LC50 Daphnia magna: 1.5 mg/L (48 hr [as As])

Chronic (long-term) toxicity

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

Product data: No data available.

Substance data:

Name	Result
Boric acid	Aquatic Invertebrates EC10 Daphnia magna: 52.9 mg/L (21 d [growth])
2,7-(bis(2-arsonophenylazo))-1,8-dihydroxynaphthalene-3,6-disulphonic acid	Fish NOEC Jordanella floridae: 2.13 mg/L (31 d [as As])
	Aquatic Invertebrates LC10 Asellus aquaticus: 0.0973 mg/L (10 d [as As])

12.2 Persistence and degradability

Product data: No data available.

Substance data:

Name	Result
Boric acid	Biodegradability studies are not applicable to inorganic substances.

12.3 Bioaccumulative potential

Product data: No data available.

Substance data:

Name	Result
Boric acid	Highly water soluble materials are unlikely to bioaccumulate to any significant degree. Borates all present essentially as undissociated and highly soluble boric acid at neutral pH. The available data indicate that both experimental data and field observations support the interpretation that borates are not significantly bioaccumulated.

12.4 Mobility in soil

Product data: No data available.

Substance data: No data available.

12.5 Results of PBT and vPvB assessment

Product data:

PBT assessment: This product does not contain any substances that are assessed to be a PBT.

vPvB assessment: This product does not contain any substances that are assessed to be a vPvB.

Substance data:

PBT assessment:

Boric acid	PBT assessment does not apply to inorganic substances.
2,7-(bis(2-arsonophenylazo))-1,8-dihydroxynaphthalene-3,6-disulphonic acid	The substance is not PBT.

vPvB assessment:

Boric acid	vPvB assessment does not apply to inorganic substances.
2,7-(bis(2-arsonophenylazo))-1,8-dihydroxynaphthalene-3,6-disulphonic acid	The substance is not vPvB.

12.6 Endocrine disrupting properties

Substance data: No data available.

12.7 Other adverse effects: No data available.

12.8 Hazard to the ozone layer

Assessment: Based on available data, the classification criteria are not met.
Product data: No data available.
Substance data: No data available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

13.1.1 Product / Packaging disposal:
Dispose of reagent to a waste disposal plant.

Waste codes / waste designations according to LoW: Not determined or not available.

13.1.2 Waste treatment-relevant information: Not determined or not available.

13.1.3 Sewage disposal-relevant information: Not determined or not available.

13.1.4 Other disposal recommendations: It is the responsibility of the waste generator to properly characterize all waste materials according to applicable regulatory entities

SECTION 14: Transport information

International Carriage of Dangerous Goods by Road/Rail (ADR/RID)

UN number or ID number	Not regulated
UN proper shipping name	Not regulated
UN transport hazard class(es)	None
Packing group	None
Environmental hazards	None
Special precautions for user	None

International Carriage of Dangerous Goods by Inland Waterways (ADN)

UN number or ID number	Not regulated
UN proper shipping name	Not regulated
UN transport hazard class(es)	None
Packing group	None
Environmental hazards	None

Special precautions for user	None

International Maritime Dangerous Goods (IMDG)

UN number or ID number	Not regulated
UN proper shipping name	Not regulated
UN transport hazard class(es)	None
Packing group	None
Environmental hazards	None
Special precautions for user	None

International Air Transport Association Dangerous Goods Regulations (IATA-DGR)

UN number or ID number	Not regulated
UN proper shipping name	Not regulated
UN transport hazard class(es)	None
Packing group	None
Environmental hazards	None
Special precautions for user	None

Maritime Transport in Bulk according to IMO Instruments

Bulk Name	None
Ship type	None
Pollution category	None
IMO hazard class	None
Environmental hazards	None
Material hazardous only in bulk	None
Cargo Group	None

SECTION 15: Regulatory information

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

European regulations

Inventory listing (EINECS): All ingredients are listed or exempt.

REACH SVHC candidate list:

10043-35-3	Boric acid	Listed
1668-00-4	2,7-(bis(2-arsonophenylazo))-1,8-dihydroxynaphthalene-3,6-disulphonic acid	Not Listed

REACH SVHC Authorizations: None of the ingredients are listed.

REACH Restriction: All ingredients are listed or exempt.

Water hazard class (WGK) (Product): Not determined.

Water hazard class (WGK) (Substance):

Ingredient Name	CAS	Class
Boric acid	10043-35-3	Water hazard class 1: slightly hazardous to water

Other regulations

Germany TA Luft:

Calcium-Arsenazo III

Ingredient Name	CAS	Class	Base Emission Rate	Max Concentration
Boric acid	10043-35-3			
2,7-(bis(2-arsonophenylazo))-1,8-dihydroxynaphthalene-3,6-disulphonic acid	1668-00-4	Class I	0.15 g/h	0.05 mg/m³

Additional information: Not determined.

15.2 Chemical Safety Assessment

No Chemical Safety Assessment has been carried out for this substance/mixture by the supplier.

SECTION 16: Other information

Abbreviations and Acronyms: None

Classification procedure:

Classification according to Regulation (EC) No. 1272/2008 (CLP)	Method Used
Reproductive toxicity, category 1B	Expert judgement

Summary of classification(s) in section 3:

Repr. 1B	Reproductive toxicity, category 1B
Acute Tox. 3 (Oral)	Acute toxicity (oral), category 3
Acute Tox. 3 (Inh)	Acute toxicity (inhalation), category 3
Aquatic Acute 1	Acute aquatic hazard, category 1
Aquatic Chronic 1	Chronic aquatic hazard, category 1

Summary of hazard statements in section 3:

H360	May damage fertility or the unborn child (state specific effect if known) (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard)
H301	Toxic if swallowed
H331	Toxic if inhaled
H400	Very toxic to aquatic life
H410	Very toxic to aquatic life with long lasting effects

Disclaimer:

This product has been classified in accordance with EC No. 1272/2008 (CLP), as amended by Commission Regulation (EU) 2019/521 and Commission Delegated Regulation (EU) 2020/217, and EC No. 1907/2006 (REACH), as amended by Commission Regulation (EU) 2020/878. The information provided in this SDS is correct, to the best of our knowledge, based on information available. The information given is designed only as a guidance for safe handling, use, storage, transportation, and disposal and is not to be considered a warranty or quality specification. The information relates only to the specific material designated and may not be valid for such material used in combination with any other materials, unless specified in the text. The responsibility to provide a safe workplace remains with the user.

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End of Safety Data Sheet