

Safety Data Sheet

V1705SS

Version number: 12.0
SDS Identifier: V1705SS

Revision: 2023-11-08

SECTION 1: Identification

1.1 Product identifier

SDS Identifier **V1705SS**
Catalog numbers K-1705

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

Relevant identified uses Components of water analysis test kits

1.3 Details of the supplier of the safety data sheet

AquaPhoenix Scientific, Inc.
860 Gitts Run Road
Hanover PA 17331
United States

Telephone: (717) 632-1291
e-mail: info@aquaphoenixsci.com
Website: <https://www.aquaphoenixsci.com/>

e-mail (competent person) scraig@aquaphoenixsci.com (Stephen Craig)

1.4 Emergency telephone number

Emergency information service ChemTel Inc.: 1-800-255-3924, +01-813-248-0585

SECTION 2: Hazard(s) identification

2.1 Classification of the substance or mixture

Classification acc. to GHS

Hazard class	Category	Hazard class and category	Hazard statement
skin corrosion/irritation	2	Skin Irrit. 2	H315
serious eye damage/eye irritation	2	Eye Irrit. 2	H319
reproductive toxicity	1B	Repr. 1B	H360FD
hazardous to the aquatic environment - acute hazard	3	Aquatic Acute 3	H402
hazardous to the aquatic environment - chronic hazard	3	Aquatic Chronic 3	H412

For full text of abbreviations: see SECTION 16.

The most important adverse physicochemical, human health and environmental effects

Spillage and fire water can cause pollution of watercourses.

Safety Data Sheet

V1705SS

Version number: 12.0
SDS Identifier: V1705SS

Revision: 2023-11-08

2.2 Label elements

Labeling

- Signal word danger

- Pictograms

GHS07, GHS08



- Hazard statements

H315 Causes skin irritation.
H319 Causes serious eye irritation.
H360FD May damage fertility. May damage the unborn child.
H412 Harmful to aquatic life with long lasting effects.

- Precautionary statements

P203 Obtain, read and follow all safety instructions before use.
P264+P265 Wash hands thoroughly after handling. Do not touch eyes.
P273 Avoid release to the environment.
P280 Wear protective gloves.
P302+P352 IF ON SKIN: Wash with plenty of 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.
P318 IF exposed or concerned, get medical advice.
P321 Specific treatment (see on this label).
P332+P317 If skin irritation occurs: Get medical help.
P337+P317 If eye irritation persists: Get medical help.
P362+P364 Take off contaminated clothing and wash it before reuse.
P405 Store locked up.
P501 Dispose of contents/container to industrial combustion plant.

- Hazardous ingredients for labelling disodium tetraborate decahydrate

2.3 Other hazards

Results of PBT and vPvB assessment

Does not contain a PBT-/vPvB-substance in a concentration of $\geq 0.1\%$.

Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) in a concentration of $\geq 0.1\%$.

V1705SS

Version number: 12.0
SDS Identifier: V1705SS

Revision: 2023-11-08





SECTION 3: Composition/information on ingredients

3.1 Substances

Not relevant (mixture)

3.2 Mixtures

Description of the mixture

Name of substance	Identifier	Wt%	Classification acc. to GHS	Pictograms
deionized water	CAS No 7732-18-5	≥ 93		
disodium tetraborate decahydrate	CAS No 1303-96-4 1330-43-4	3	Acute Tox. 5 / H303 Acute Tox. 5 / H313 Acute Tox. 4 / H332 Repr. 1B / H360FD	
ammonium chloride	CAS No 12125-02-9	≤ 1	Acute Tox. 4 / H302 Acute Tox. 5 / H313 Eye Irrit. 2 / H319	
ethylene glycol tetraacetic acid	CAS No 67-42-5	≤ 1		
zinc sulfate, heptahydrate	CAS No 7446-20-0 7733-02-0	≤ 1	Acute Tox. 4 / H302 Acute Tox. 5 / H313 Eye Dam. 1 / H318 Aquatic Acute 1 / H400 Aquatic Chronic 1 / H410	
sodium hydroxide	CAS No 1310-73-2	0.6	Acute Tox. 4 / H302 Skin Corr. 1A / H314 Eye Dam. 1 / H318 Aquatic Acute 3 / H402	

For full text of abbreviations: see SECTION 16.

SECTION 4: First-aid measures

4.1 Description of first-aid measures

General notes

Do not leave affected person unattended. Remove victim out of the danger area. Keep affected person warm, still and covered. Take off immediately all contaminated clothing. In all cases of doubt, or when symptoms persist, seek medical advice. In case of unconsciousness place person in the recovery position. Never give anything by mouth.

Following inhalation

If breathing is irregular or stopped, immediately seek medical assistance and start first aid actions. In case of respiratory tract irritation, consult a physician. Provide fresh air.

Following skin contact

Wash with plenty of soap and water.

V1705SS

Version number: 12.0
SDS Identifier: V1705SS

Revision: 2023-11-08

Following eye contact

Remove contact lenses, if present and easy to do. Continue rinsing. Irrigate copiously with clean, fresh water for at least 10 minutes, holding the eyelids apart.

Following ingestion

Rinse mouth with water (only if the person is conscious). Do NOT induce vomiting.

4.2 Most important symptoms and effects, both acute and delayed

Symptoms and effects are not known to date.

4.3 Indication of any immediate medical attention and special treatment needed

none

SECTION 5: Fire-fighting measures

5.1 Extinguishing media

Suitable extinguishing media

Water spray, Alcohol resistant foam, BC-powder, Carbon dioxide (CO₂)

Unsuitable extinguishing media

Water jet

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products

Nitrogen oxides (NO_x)

5.3 Advice for firefighters

In case of fire and/or explosion do not breathe fumes. Coordinate firefighting measures to the fire surroundings. Do not allow firefighting water to enter drains or water courses. Collect contaminated firefighting water separately. Fight fire with normal precautions from a reasonable distance.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Remove persons to safety.

For emergency responders

Wear breathing apparatus if exposed to vapors/dust/aerosols/gases.

6.2 Environmental precautions

Keep away from drains, surface and ground water. Retain contaminated washing water and dispose of it. If substance has entered a water course or sewer, inform the responsible authority.

V1705SS

Version number: 12.0
SDS Identifier: V1705SS

Revision: 2023-11-08

6.3 Methods and material for containment and cleaning up

Advice on how to contain a spill

Covering of drains

Advice on how to clean up a spill

Wipe up with absorbent material (e.g. cloth, fleece). Collect spillage: sawdust, kieselgur (diatomite), sand, universal binder

Appropriate containment techniques

Use of adsorbent materials.

Other information relating to spills and releases

Place in appropriate containers for disposal. Ventilate affected area.

6.4 Reference to other sections

Hazardous combustion products: see section 5. Personal protective equipment: see section 8. Incompatible materials: see section 10. Disposal considerations: see section 13.

SECTION 7: Handling and storage

7.1 Precautions for safe handling

Recommendations

Wear impact- and splash-resistant eyewear. Breaking the ampoule tip in air when a valve assembly is not attached may cause the glass ampoule to shatter.

- Measures to prevent fire as well as aerosol and dust generation

Use local and general ventilation. Use only in well-ventilated areas.

Advice on general occupational hygiene

Wash hands after use. Do not eat, drink and smoke in work areas. Remove contaminated clothing and protective equipment before entering eating areas. Never keep food or drink in the vicinity of chemicals. Never place chemicals in containers that are normally used for food or drink. Keep away from food, drink and animal feedingstuffs.

7.2 Conditions for safe storage, including any incompatibilities

Control of the effects

Protect against external exposure, such as

heat, high temperatures, light, UV-radiation/sunlight

V1705SS

Version number: 12.0
SDS Identifier: V1705SS

Revision: 2023-11-08

SECTION 8: Exposure controls/personal protection

8.1 Control parameters

Occupational exposure limit values (Workplace Exposure Limits)											
Country	Name of agent	CAS No	Identifier	TWA [ppm]	TWA [mg/m ³]	STEL [ppm]	STEL [mg/m ³]	Ceiling-C [ppm]	Ceiling-C [mg/m ³]	Notation	Source
US	ammonium chloride	12125-02-9	PEL (CA)		10		20			fume	Cal/ OSHA PEL
US	ammonium chloride	12125-02-9	REL		10 (10 h)		20			fume	NIOSH REL
US	ammonium chloride	12125-02-9	TLV®		10		20			fume	ACGIH® 2023
US	disodium tetraborate decahydrate	1303-96-4	PEL (CA)		5						Cal/ OSHA PEL
US	disodium tetraborate decahydrate	1303-96-4	REL		5 (10 h)						NIOSH REL
US	sodium borate decahydrate	1303-96-4	TLV®		2		6			i	ACGIH® 2023
US	sodium hydroxide	1310-73-2	REL						2		NIOSH REL
US	sodium hydroxide	1310-73-2	TLV®						2		ACGIH® 2023
US	sodium hydroxide	1310-73-2	PEL		2						29 CFR 1910.1000
US	sodium hydroxide (caustic soda)	1310-73-2	PEL (CA)						2		Cal/ OSHA PEL
US	disodium tetraborate, anhydrous	1330-43-4	PEL (CA)		5						Cal/ OSHA PEL
US	disodium tetraborate, anhydrous	1330-43-4	REL		1 (10 h)						NIOSH REL
US	sodium tetraborate, anhydrous	1330-43-4	TLV®		2		6			i	ACGIH® 2023

Notation

Ceiling-C

fume

i

STEL

ceiling value is a limit value above which exposure should not occur

as fume

inhalable fraction

short-term exposure limit: a limit value above which exposure should not occur and which is related to a 15-minute period (unless otherwise specified)

Safety Data Sheet

V1705SS

Version number: 12.0
SDS Identifier: V1705SS

Revision: 2023-11-08

Notation

TWA time-weighted average (long-term exposure limit): measured or calculated in relation to a reference period of 8 hours time-weighted average (unless otherwise specified)

Relevant DNELs of components						
Name of substance	CAS No	Endpoint	Threshold level	Protection goal, route of exposure	Used in	Exposure time
disodium tetraborate decahydrate	1303-96-4 1330-43-4	DNEL	6.7 mg/m ³	human, inhalatory	worker (industry)	chronic - systemic effects
disodium tetraborate decahydrate	1303-96-4 1330-43-4	DNEL	316.4 mg/kg bw/day	human, dermal	worker (industry)	chronic - systemic effects
sodium hydroxide	1310-73-2	DNEL	1 mg/m ³	human, inhalatory	worker (industry)	chronic - local effects

Relevant PNECs of components						
Name of substance	CAS No	Endpoint	Threshold level	Organism	Environmental compartment	Exposure time
disodium tetraborate decahydrate	1303-96-4 1330-43-4	PNEC	2.9 mg/l	aquatic organisms	freshwater	short-term (single instance)
disodium tetraborate decahydrate	1303-96-4 1330-43-4	PNEC	2.9 mg/l	aquatic organisms	marine water	short-term (single instance)
disodium tetraborate decahydrate	1303-96-4 1330-43-4	PNEC	10 mg/l	aquatic organisms	sewage treatment plant (STP)	short-term (single instance)
disodium tetraborate decahydrate	1303-96-4 1330-43-4	PNEC	5.7 mg/kg	terrestrial organisms	soil	short-term (single instance)

8.2 Exposure controls

Appropriate engineering controls

General ventilation.

Individual protection measures (personal protective equipment)

Eye/face protection

Wear eye/face protection.

Skin protection

- Hand protection

Wear suitable gloves. Chemical protection gloves are suitable, which are tested according to EN 374. Check leak-tightness/impermeability prior to use. In the case of wanting to use the gloves again, clean them before taking off and air them well. 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.

Safety Data Sheet

V1705SS

Version number: 12.0
SDS Identifier: V1705SS

Revision: 2023-11-08

- Other protection measures

Wash hands thoroughly after handling.

Respiratory protection

In case of inadequate ventilation wear respiratory protection.

Environmental exposure controls

Use appropriate container to avoid environmental contamination. Keep away from drains, surface and ground water.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Product description: Each Titret™ ampoule is a 13 mm glass ampoule containing approximately 1.1 mL of liquid reagent sealed under vacuum.

Physical state	liquid
Color	colorless
Odor	odorless
Melting point/freezing point	0 °C
Boiling point or initial boiling point and boiling range	100 °C at 101.3 kPa
Evaporation rate	not determined
Flammability	non-combustible
Lower and upper explosion limit	not determined
Flash point	not determined
Auto-ignition temperature	not determined
Decomposition temperature	not relevant
pH (value)	10
Kinematic viscosity	not determined

Solubility(ies)

Water solubility	miscible in any proportion
------------------	----------------------------

Safety Data Sheet

V1705SS

Version number: 12.0
SDS Identifier: V1705SS

Revision: 2023-11-08

Partition coefficient

Partition coefficient n-octanol/water (log value)	this information is not available
---	-----------------------------------

Vapor pressure	23.7 mmHg at 25 °C
----------------	--------------------

Density and/or relative density

Density	not determined
Relative vapour density	information on this property is not available
Relative density	1 (water = 1)

Particle characteristics	not relevant (liquid)
--------------------------	-----------------------

SECTION 10: Stability and reactivity

10.1 Reactivity

Concerning incompatibility: see below "Conditions to avoid" and "Incompatible materials".

10.2 Chemical stability

See below "Conditions to avoid".

10.3 Possibility of hazardous reactions

No known hazardous reactions.

10.4 Conditions to avoid

There are no specific conditions known which have to be avoided.

10.5 Incompatible materials

There is no additional information.

10.6 Hazardous decomposition products

Reasonably anticipated hazardous decomposition products produced as a result of use, storage, spill and heating are not known. Hazardous combustion products: see section 5.

V1705SS

Version number: 12.0
SDS Identifier: V1705SS

Revision: 2023-11-08

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Test data are not available for the complete mixture.

Classification procedure

The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

Classification acc. to OSHA "Hazard Communication Standard" (29 CFR 1910.1200)

Acute toxicity

Shall not be classified as acutely toxic.

Acute toxicity estimate (ATE) of components

Name of substance	CAS No	Exposure route	ATE
disodium tetraborate decahydrate	1303-96-4 1330-43-4	oral	>2,500 mg/kg
disodium tetraborate decahydrate	1303-96-4 1330-43-4	dermal	>2,000 mg/kg
disodium tetraborate decahydrate	1303-96-4 1330-43-4	inhalation: dust/mist	>2.04 mg/l/4h
ammonium chloride	12125-02-9	oral	1,410 mg/kg
ammonium chloride	12125-02-9	dermal	>2,000 mg/kg
zinc sulfate, heptahydrate	7446-20-0 7733-02-0	oral	926 mg/kg
zinc sulfate, heptahydrate	7446-20-0 7733-02-0	dermal	>2,000 mg/kg
sodium hydroxide	1310-73-2	oral	325 mg/kg

Skin corrosion/irritation

Causes skin irritation.

Serious eye damage/eye irritation

Causes serious eye irritation.

Respiratory or skin sensitization

Shall not be classified as a respiratory or skin sensitizer.

Germ cell mutagenicity

Shall not be classified as germ cell mutagenic.

V1705SS

Version number: 12.0
SDS Identifier: V1705SS

Revision: 2023-11-08

Carcinogenicity

Shall not be classified as carcinogenic.

Reproductive toxicity

May damage the unborn child. May damage fertility.

Specific target organ toxicity - single exposure

Shall not be classified as a specific target organ toxicant (single exposure).

Specific target organ toxicity - repeated exposure

Shall not be classified as a specific target organ toxicant (repeated exposure).

Aspiration hazard

Shall not be classified as presenting an aspiration hazard.

11.2 Information on other hazards

There is no additional information.

SECTION 12: Ecological information

12.1 Toxicity

Harmful to aquatic life with long lasting effects.

Aquatic toxicity (acute) of components					
Name of substance	CAS No	Endpoint	Value	Species	Exposure time
ammonium chloride	12125-02-9	LC50	209 mg/l	fish	96 h
ammonium chloride	12125-02-9	EC50	101 mg/l	aquatic invertebrates	48 h
zinc sulfate, heptahydrate	7446-20-0 7733-02-0	LC50	315 µg/l	fish	96 h
zinc sulfate, heptahydrate	7446-20-0 7733-02-0	EC50	2,140 µg/l	aquatic invertebrates	48 h
zinc sulfate, heptahydrate	7446-20-0 7733-02-0	ErC50	2,700 µg/l	algae	48 h
sodium hydroxide	1310-73-2	LC50	<180 mg/l	fish	96 h
sodium hydroxide	1310-73-2	EC50	40.4 mg/l	aquatic invertebrates	48 h

Safety Data Sheet

V1705SS

Version number: 12.0
SDS Identifier: V1705SS

Revision: 2023-11-08

Aquatic toxicity (chronic) of components

Name of substance	CAS No	Endpoint	Value	Species	Exposure time
ammonium chloride	12125-02-9	ErC50	1,300 mg/l	algae	5 d
ammonium chloride	12125-02-9	LC50	5,080 mg/l	algae	5 d
ammonium chloride	12125-02-9	EC50	2,700 mg/l	algae	18 d
zinc sulfate, heptahydrate	7446-20-0 7733-02-0	LC50	330 µg/l	fish	95 h
zinc sulfate, heptahydrate	7446-20-0 7733-02-0	EC50	75 µg/l	fish	28 d
zinc sulfate, heptahydrate	7446-20-0 7733-02-0	EbC50	6,813 µg/l	aquatic invertebrates	21 d
zinc sulfate, heptahydrate	7446-20-0 7733-02-0	ErC50	39,240 µg/l	algae	2 d
sodium hydroxide	1310-73-2	EC50	22 mg/l	microorganisms	15 min

12.2 Persistence and degradability

Data are not available.

12.3 Bioaccumulative potential

Data are not available.

Bioaccumulative potential of components

Name of substance	CAS No	BCF	Log KOW	BOD5/COD
disodium tetraborate decahydrate	1303-96-4 1330-43-4		-1.53 (pH value: 7.5, 22 °C)	
ethylene glycol tetraacetic acid	67-42-5		-2.936	
zinc sulfate, heptahydrate	7446-20-0 7733-02-0	69.48		

12.4 Mobility in soil

Data are not available.

12.5 Results of PBT and vPvB assessment

According to the results of its assessment, this substance is not a PBT or a vPvB. Does not contain a PBT-/vPvB-substance in a concentration of $\geq 0.1\%$.

12.6 Endocrine disrupting properties

Does not contain an endocrine disruptor (ED) in a concentration of $\geq 0.1\%$.

V1705SS

Version number: 12.0
SDS Identifier: V1705SS

Revision: 2023-11-08

12.7 Other adverse effects

Data are not available.

SECTION 13: Disposal considerations

13.1 Waste treatment methods

Please consider the relevant national or regional provisions.

SECTION 14: Transport information

- | | |
|---------------------------------|---|
| 14.1 UN number | not subject to transport regulations |
| 14.2 UN proper shipping name | not relevant |
| 14.3 Transport hazard class(es) | none |
| 14.4 Packing group | not assigned |
| 14.5 Environmental hazards | non-environmentally hazardous acc. to the dangerous goods regulations |
- 14.6 Other relevant information**
- Shipping container markings and labels, received from CHEMetrics, may vary from the above information. Products that are regulated for transport will be packaged by CHEMetrics as Dangerous Goods in Excepted Quantities according to IATA, US DOT, and IMDG regulations. CHEMetrics may also elect to ship certain products as UN 3316 Chemical Kit, Hazard Class 9, Packing Group II or III. In case of reshipment, it is the responsibility of the shipper to determine appropriate labels and markings in accordance with applicable transportation regulations.
- 14.7 Maritime transport in bulk according to IMO instruments**
- The cargo is not intended to be carried in bulk.

Information for each of the UN Model Regulations

Transport of dangerous goods by road or rail (49 CFR US DOT) - Additional information

Not subject to transport regulations.

International Maritime Dangerous Goods Code (IMDG) - Additional information

Not subject to IMDG.

International Civil Aviation Organization (ICAO-IATA/DGR) - Additional information

Not subject to ICAO-IATA.

V1705SS

Version number: 12.0
SDS Identifier: V1705SS

Revision: 2023-11-08

SECTION 15: Regulatory information

15.1 Safety, health and environmental regulations specific for the product in question

National regulations (United States)

Toxic Substance Control Act (TSCA)

all ingredients are listed (ACTIVE) or exempt from listing

Superfund Amendment and Reauthorization Act (SARA TITLE III)

- The List of Extremely Hazardous Substances and Their Threshold Planning Quantities (EPCRA Section 302, 304)

none of the ingredients are listed

- Specific Toxic Chemical Listings (EPCRA Section 313)

Toxics Release Inventory: Specific Toxic Chemical Listings

Name of substance	Remarks	Effective date
zinc sulfate, heptahydrate		1986-12-31

Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)

- List of Hazardous Substances and Reportable Quantities (CERCLA section 102a) (40 CFR 302.4)

Name of substance	Remarks	Statutory code	Final RQ pounds (Kg)
sodium hydroxide		1	1000 (454)
ammonium chloride		1	5000 (2270)
zinc sulfate, heptahydrate		1	1000 (454)

Legend

1 "1" indicates that the statutory source is section 311(b)(2) of the Clean Water Act

Clean Air Act

none of the ingredients are listed

Right to Know Hazardous Substance List

- Hazardous Substance List (NJ-RTK)

Safety Data Sheet

V1705SS

Version number: 12.0
SDS Identifier: V1705SS

Revision: 2023-11-08

Name of substance	Remarks	Classifications
sodium hydroxide		CO R1
disodium tetraborate decahydrate		
ammonium chloride		
zinc sulfate, heptahydrate		
zinc sulfate, heptahydrate		

Legend

CO Corrosive
R1 Reactive - First Degree

California Environmental Protection Agency (Cal/EPA): Proposition 65 - Safe Drinking Water and Toxic Enforcement Act of 1987

none of the ingredients are listed

National inventories

Country	Inventory	Status
AU	AIIC	all ingredients are listed
CA	DSL	all ingredients are listed
CN	IECSC	all ingredients are listed
EU	ECSI	all ingredients are listed
EU	REACH Reg.	not all ingredients are listed
JP	CSCL-ENCS	not all ingredients are listed
JP	ISHA-ENCS	not all ingredients are listed
KR	KECI	not all ingredients are listed
MX	INSQ	not all ingredients are listed
NZ	NZIoC	all ingredients are listed
PH	PICCS	all ingredients are listed
TR	CICR	not all ingredients are listed
TW	TCSI	all ingredients are listed
US	TSCA	all ingredients are listed (ACTIVE)
VN	NCI	all ingredients are listed

Legend

AIIC Australian Inventory of Industrial Chemicals
CICR Chemical Inventory and Control Regulation

Safety Data Sheet

V1705SS

Version number: 12.0
SDS Identifier: V1705SS

Revision: 2023-11-08

Legend

CSCL-ENCS	List of Existing and New Chemical Substances (CSCL-ENCS)
DSL	Domestic Substances List (DSL)
ECSI	EC Substance Inventory (EINECS, ELINCS, NLP)
IECSC	Inventory of Existing Chemical Substances Produced or Imported in China
INSQ	National Inventory of Chemical Substances
ISHA-ENCS	Inventory of Existing and New Chemical Substances (ISHA-ENCS)
KECI	Korea Existing Chemicals Inventory
NCI	National Chemical Inventory
NZIoC	New Zealand Inventory of Chemicals
PICCS	Philippine Inventory of Chemicals and Chemical Substances (PICCS)
REACH Reg.	REACH registered substances
TCSI	Taiwan Chemical Substance Inventory
TSCA	Toxic Substance Control Act

15.2 Chemical Safety Assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information, including date of preparation or last revision

Abbreviations and acronyms

Abbr.	Descriptions of used abbreviations
29 CFR 1910.1000	29 CFR 1910.1000, Tables Z-1, Z-2, Z-3 - Occupational Safety and Health Standards: Toxic and Hazardous Substances (permissible exposure limits)
49 CFR US DOT	49 CFR U.S. Department of Transportation
ACGIH® 2023	From ACGIH®, 2023 TLVs® and BEIs® Book. Copyright 2023. Reprinted with permission. Information on the proper use of the TLVs® and BEIs®: http://www.acgih.org/tlv-bei-guidelines/policies-procedures-presentations/tlv-bei-position-statement
Acute Tox.	Acute toxicity
Aquatic Acute	Hazardous to the aquatic environment - acute hazard
Aquatic Chronic	Hazardous to the aquatic environment - chronic hazard
ATE	Acute Toxicity Estimate
BCF	Bioconcentration factor
BOD	Biochemical Oxygen Demand
Cal/OSHA PEL	California Division of Occupational Safety and Health (Cal/OSHA): Permissible Exposure Limits (PELs)
CAS	Chemical Abstracts Service (service that maintains the most comprehensive list of chemical substances)
Ceiling-C	Ceiling value
COD	Chemical oxygen demand
DGR	Dangerous Goods Regulations (see IATA/DGR)
DNEL	Derived No-Effect Level

Safety Data Sheet

V1705SS

Version number: 12.0
SDS Identifier: V1705SS

Revision: 2023-11-08

Abbr.	Descriptions of used abbreviations
EbC50	≡ EC50: in this method, that concentration of test substance which results in a 50 % reduction in either growth (EbC50) or growth rate (ErC50) relative to the control
EC50	Effective Concentration 50 %. The EC50 corresponds to the concentration of a tested substance causing 50 % changes in response (e.g. on growth) during a specified time interval
ED	Endocrine disruptor
EINECS	European Inventory of Existing Commercial Chemical Substances
ELINCS	European List of Notified Chemical Substances
ErC50	≡ EC50: in this method, that concentration of test substance which results in a 50 % reduction in either growth (EbC50) or growth rate (ErC50) relative to the control
Eye Dam.	Seriously damaging to the eye
Eye Irrit.	Irritant to the eye
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
IATA	International Air Transport Association
IATA/DGR	Dangerous Goods Regulations (DGR) for the air transport (IATA)
ICAO	International Civil Aviation Organization
IMDG	International Maritime Dangerous Goods Code
LC50	Lethal Concentration 50%: the LC50 corresponds to the concentration of a tested substance causing 50 % lethality during a specified time interval
log KOW	n-Octanol/water
NIOSH REL	National Institute for Occupational Safety and Health (NIOSH); Recommended Exposure Limits (RELs)
NLP	No-Longer Polymer
OSHA	Occupational Safety and Health Administration (United States)
PBT	Persistent, Bioaccumulative and Toxic
PEL	Permissible exposure limit
PNEC	Predicted No-Effect Concentration
ppm	Parts per million
Repr.	Reproductive toxicity
RTECS	Registry of Toxic Effects of Chemical Substances (database of NIOSH with toxicological information)
Skin Corr.	Corrosive to skin
Skin Irrit.	Irritant to skin
STEL	Short-term exposure limit
TLV®	Threshold Limit Values

Safety Data Sheet

V1705SS

Version number: 12.0
SDS Identifier: V1705SS

Revision: 2023-11-08

Abbr.	Descriptions of used abbreviations
TWA	Time-weighted average
vPvB	Very Persistent and very Bioaccumulative

Key literature references and sources for data

Globally Harmonized System of Classification and Labelling of Chemicals ("Purple book").

Transport of dangerous goods by road or rail (49 CFR US DOT). International Maritime Dangerous Goods Code (IMDG). Dangerous Goods Regulations (DGR) for the air transport (IATA).

Classification procedure

Physical and chemical properties: The classification is based on tested mixture.

Health hazards, Environmental hazards: The method for classification of the mixture is based on ingredients of the mixture (additivity formula).

List of relevant phrases (code and full text as stated in section 2 and 3)

Code	Text
H302	Harmful if swallowed.
H303	May be harmful if swallowed.
H313	May be harmful in contact with skin.
H314	Causes severe skin burns and eye damage.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H332	Harmful if inhaled.
H360FD	May damage fertility. May damage the unborn child.
H400	Very toxic to aquatic life.
H402	Harmful to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H412	Harmful to aquatic life with long lasting effects.

Disclaimer

This information is based upon the present state of our knowledge. This SDS has been compiled and is solely intended for this product.