

SAFETY DATA SHEET according to regulation 1907/2006

Product name: SpaBalancer pH-Minus liquid

Creation date: 04.10.2019, Revision: 25.06.2022, version: 4.0

SECTION 1: IDENTIFICATION OF THE SUBSTANCE/MIXTURE AND OF THE COMPANY/UNDERTAKING

1.1 Product identifier

Product name

SpaBalancer pH-Minus liquid

UFI:

1MU2-H031-G008-GFPF



<https://my.chemius.net/p/v3hBZR/en/pd/en>

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

Relevant identified uses

PH regulator.

Uses advised against

No information.

1.3 Details of the supplier of the safety data sheet

Manufacturer

SpaBalancer GmbH

Verbindungsweg 42

D-25469 Halstenbek, Germany

+49(0)4101 - 37 444 80

info@spabalancer.com

1.4 Emergency Telephone Number

Emergency

112

Manufacturer

+49(0)4101 - 37 444 80

SECTION 2: HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

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

Met. Corr. 1; H290 May be corrosive to metals.

Skin Corr. 1B; H314.1B Causes severe skin burns and eye damage.

Eye Dam. 1; H318 Causes serious eye damage.

2.2 Label elements

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

**Signal word: Danger**

H290 May be corrosive to metals.

H314 Causes severe skin burns and eye damage.

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P234 Keep only in original packaging.

P260 Do not breathe vapours/spray.

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P301 + P330 + P331 IF SWALLOWED: rinse mouth. Do NOT induce vomiting.

P303 + P361 + P353 IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water [or shower].

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 or doctor/physician.

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/national regulation.

Contains:

etidronic acid

hydrochloric acid

phosphoric acid

2.3 Other hazards

The substances in the mixture are not classified as persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB).

SECTION 3: COMPOSITION/INFORMATION ON INGREDIENTS**3.1 Substances**

For mixtures see 3.2.

3.2 Mixtures

Name	CAS EC Index Reach	%	Classification according to Regulation (EC) No 1272/2008 (CLP)	Specific Conc. Limits	Notes for substances
etidronic acid	2809-21-4 220-552-8 -	10-20	Met. Corr. 1; H290 Acute Tox. 4; H302 Eye Dam. 1; H318	/	/
hydrochloric acid	7647-01-0 231-595-7 017-002-00-2	1-<10	Met. Corr. 1; H290 Skin Corr. 1B; H314.1B STOT SE 3; H335	/	/
phosphoric acid	7664-38-2 231-633-2 015-011-00-6	1-<10	Met. Corr. 1; H290 Skin Corr. 1B; H314.1B	/	/

Product description

SVHC: Contains zero or less than 0.1% of SVHC substance.

SECTION 4: FIRST AID MEASURES

4.1 First aid measures

General notes

Never give anything by mouth to an unconscious person. Place patient in recovery position and ensure airway patency. When in doubt or if feeling unwell seek medical assistance. Show the safety data sheet and label to the physician.

Following inhalation

Remove patient to fresh air - move out of dangerous area. Obtain professional medical help!

Following skin contact

Take off all contaminated clothing. Wash affected skin areas thoroughly with plenty of water and soap. Immediately obtain professional medical help! Wash contaminated clothes and shoes before reuse.

Following eye contact

Immediately flush eyes with running water, keeping eyelids apart. After initial flushing, remove any contact lenses and continue flushing. Protect the damaged eye. Consult a physician immediately!

Following ingestion

Rinse mouth and drink plenty of water (only if the person is conscious). Do not induce vomiting! Immediately consult a doctor. Show the physician the safety data sheet or label.

4.2 Most important symptoms and effects, both acute and delayed

Following inhalation

Inhalation of mist can cause irritation of the respiratory tract (sneezing, coughing, burning sensation in the nose and throat).

Following skin contact

Skin burns: Signs/symptoms may include localised redness, swelling, itching, dryness, blistering.

Following eye contact

Redness, pain, burning sensation, tearing, can cause permanent damage to the eyes.

Following ingestion

If ingested, may cause burns of the mouth and throat, as well as perforation of the esophagus and stomach. May cause abdominal discomfort. May cause nausea/vomiting and diarrhea.

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

Carbon dioxide (CO₂).

Foam.

Fire extinguishing powder.

Water spray.

Unsuitable extinguishing media

Full water jet.

5.2 Special hazards arising from the substance or mixture

Hazardous combustion products

In case of a fire toxic gases can be generated; do not inhale gases/smoke. In the event of fire the following can be generated: carbon monoxide (CO), carbon dioxide (CO₂).

hydrochloric acid.

Phosphorus oxides.

5.3 Advice for firefighters

Protective actions

In case of fire or heating do not breathe fumes/vapours. No action shall be taken involving any personal risk or without suitable training. Cool containers at risk with water spray. If possible remove containers from endangered area.

Special protective equipment for fire-fighters

Firefighters should wear appropriate protective clothing for firefighters (including helmets, protective boots and gloves) (EN 469) and self-contained breathing apparatus (SCBA) with a full face-piece (EN 137).

Additional information

Contaminated firefighting water must be disposed of in accordance with the regulations; do not allow to reach the sewage system. Contaminated firefighting water and fire residues must be disposed of in accordance with the local regulations.

SECTION 6: ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

Protective equipment

Use personal protective equipment (Section 8).

Precautionary measures

Ensure adequate ventilation.

Emergency procedures

Evacuate personnel to safe areas, away from the direction of the wind. Avoid contact with skin, eyes and clothing. Do not breathe vapour or mist.

For emergency responders

Use personal protective equipment.

6.2 Environmental precautions

Do not allow product to reach water/drains/sewage systems or permeable soil. Dilute with plenty of water. In case of release into the environment, inform the relevant authorities.

6.3 Methods and material for containment and cleaning up

For containment

Stem the spill if this does not pose risks.

For cleaning up

Absorb product (with inert material), collect it in special container and dispose it to a licensed hazardous-waste disposal contractor.

OTHER INFORMATION

See Section 7: safe handling.

6.4 Reference to other sections

See also sections 8 and 13.

SECTION 7: HANDLING AND STORAGE

7.1 Precautions for safe handling

Protective measures

Measures to prevent fire

Ensure adequate ventilation.

Measures to prevent aerosol and dust generation

Use general or local exhaust ventilation to prevent inhaling vapours and aerosols. Avoid formation of aerosols.

Measures to protect the environment

Do not discharge into drains, surface water and soil. After use immediately close container tightly.

Other measures

No information.

Advice on general occupational hygiene

Use good personal hygiene practices – wash hands at breaks and when done working with material. Do not eat, drink or smoke while working. Protect skin with protective cream before use. Avoid contact with skin, eyes and clothes. Do not breathe vapours/mist. Use only in well-ventilated areas. Wear suitable protective equipment; see Section 8. Remove contaminated clothes and wash them before reuse.

7.2 Conditions for safe storage, including any incompatibilities

Technical measures and storage conditions

Keep in tightly closed container. Keep in a cool, dry and well ventilated place. Protect from open fire, heat and direct sunlight. Store away from alkaline substances. Keep away from food, drink and animal feeding stuffs.

Packaging materials

Store only in original container.

Requirements for storage rooms and vessels

Close opened containers after use. Put the containers upright to prevent from leaking. The floor of the storage room must be impermeable and resistant to chemicals (base, acid).

Storage class

No information.

Further information on storage conditions

No information.

7.3 Specific end use(s)

Recommendations

See identified uses in Section 1.2.

Industrial sector specific solutions

No information.

SECTION 8: EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Control parameters

Occupational Exposure limit values

Name	mg/m ³	ml/m ³	Short-term value mg/m ³	Short-term value ml/m ³	Remark	Biological Tolerance Values
Hydrogen chloride (gas and aerosol mists) (7647-01-0)	2	1	8	5	/	/
Orthophosphoric acid (7664-38-2)	1	/	2	/	/	/

Information on monitoring procedures

BS EN 14042:2003 Title Identifier: Workplace atmospheres. Guide for the application and use of procedures for the assessment of exposure to chemical and biological agents. BS EN 482:2021 Workplace exposure. Procedures for the determination of the concentration of chemical agents. Basic performance requirements.

DNEL/DMEL values

For product

No information.

For components

No information.

PNEC values

For product

No information.

For components

No information.

8.2 Exposure controls

Appropriate engineering control

Substance/mixture related measures to prevent exposure during identified uses

Handle in accordance with good industrial hygiene and safety practice. Use good personal hygiene practices – wash hands at breaks and when done working with material. Do not eat, drink or smoke while working. Avoid contact with skin, eyes and clothes. Do not breathe vapours/aerosols. The selection of personal protective equipment depends on the concentration of the dangerous substance and the specificity of the workplace. Your supplier of personal protective equipment should be consulted for advice on selection and appropriate standards.

Structural measures to prevent exposure

No information.

Organisational measures to prevent exposure

Remove all contaminated clothes immediately and wash them before reuse. Keep eyewash bottles or personal eyewash units and emergency showers available. Measurement methods for performing chemical measurement procedures must be in accordance with EN 482.

Technical measures to prevent exposure

Provide good ventilation and local exhaust in areas with increased concentration. Keep away from food, drink and animal feeding stuffs.

Personal protective equipment

Eye and face protection

Wear tight fitting protective goggles and/or face protection (EN 166).

Hand protection

Protective gloves (EN 374). Observe the manufacturer's instructions regarding the use, storage, maintenance and replacement of gloves. In case of damage or at the first signs of wear and tear, change the gloves immediately. The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer.

Appropriate materials

Material	Thickness	Penetration Time	Remark
PVC	> 0.7 mm	> 480 min	/

Skin protection

Wear suitable protective clothing. Cotton protective clothing and shoes that cover the entire foot (EN ISO 20345). At higher exposures wear chemical-resistant clothing (EN 13034) and boots, natural rubber (EN 20345).

Respiratory protection

Not needed under normal use and adequate ventilation. In case of insufficient ventilation wear suitable respiratory protection. Wear suitable protective breathing mask (EN 136) with filter ABE-P2 (EN 14387). For dust/gas/ vapor concentrations above the applicable filter limit, in case of oxygen concentrations below 17% or in vague conditions, autonomous self-contained breathing apparatus should be used, according to standard EN 137, EN 138.

Thermal hazards

No information.

Environmental exposure controls

Substance/mixture related measures to prevent exposure

No information.

Instruction measures to prevent exposure

No information.

Organisational measures to prevent exposure

No information.

Technical measures to prevent exposure

Do not allow product to reach drains, sewage systems or ground water.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Physical state

liquid

Colour

colourless

Odour

pungent

Important health, safety and environmental information

Odour threshold	No information.
pH	< 2
Melting point/Freezing point	No information.
Initial boiling point/boiling range	100 °C
Flash point	No information.
Evaporation rate	No information.
Flammability (solid, gas)	No information.
Explosion limits (vol%)	No information.
Vapour pressure	No information.
Vapour density	No information.
Density / weight	Density: 1.133 g/cm ³ at 20 °C
Solubility	Water: miscible
Partition coefficient	No information.
Auto-ignition temperature	No information.
Decomposition temperature	No information.
Viscosity	No information.
Explosive properties	Product is not self igniting.
Oxidising properties	Not oxidising.

9.2 OTHER INFORMATION

No information.

SECTION 10: STABILITY AND REACTIVITY

10.1 Reactivity

May be corrosive to metals.

10.2 Chemical stability

Product is stable under normal conditions of use, recommended handling and storage conditions.

10.3 Possibility of hazardous reactions

Reactions with oxidising agents. Reactions with bases. Contact with acids liberates flammable gas (chlorine).

10.4 Conditions to avoid

Avoid contact with incompatible materials.

10.5 Incompatible materials

Strong oxidising agents. Bases.

Acids.
Base metals.

10.6 Hazardous decomposition products

Under normal use conditions no hazardous decomposition products are expected. In case of fire/explosion vapours/gases that pose a health hazard are released. Carbon dioxide; Carbon monoxide. Phosphorus oxides Hydrogen chloride (HCl).

SECTION 11: TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

(a) Acute toxicity

For components

Name	Exposure route	Type	Species	Time	value	Method	Remark
hydrochloric acid	oral	LD ₅₀	rat	/	700 mg/kg bw	IUCLID	/
hydrochloric acid	dermal	LD ₅₀	rabbit	/	> 5010 mg/kg	/	/
phosphoric acid	oral	LD ₅₀	rat	/	- 1530 mg/kg	/	/
phosphoric acid	dermal	LD ₅₀	rabbit	/	- 2740 mg/kg	/	/
phosphoric acid	inhalation	LC ₅₀	rat	1 h	> - 0.85 mg/l	/	/

Additional information

The product is not classified for acute toxicity.

(b) Skin corrosion/irritation

No information.

Additional information

Corrosive.

(c) Serious eye damage/irritation

No information.

Additional information

Causes serious eye damage.

(d) Respiratory or skin sensitisation

No information.

Additional information

The product is not classified as sensitising.

(e) (Germ cell) mutagenicity

No information.

(f) Carcinogenicity

No information.

(g) Reproductive toxicity

No information.

Summary of evaluation of the CMR properties

The product is not classified as carcinogenic, mutagenic or toxic for reproduction.

(h) STOT-single exposure

No information.

Additional information

STOT SE (single exposure): Not classified.

(i) STOT-repeated exposure

No information.

Additional information

STOT RE (repeated exposure): Not classified.

(j) Aspiration hazard

No information.

Additional information

Aspiration hazard: Not classified.

SECTION 12: ECOLOGICAL INFORMATION**12.1 Toxicity****Acute (short-term) toxicity**

No information.

Chronic (long-term) toxicity

No information.

12.2 Persistence and degradability**Abiotic degradation, physical- and photo-chemical elimination**

No information.

Biodegradation

No information.

12.3 Bioaccumulative potential**Partition coefficient**

No information.

Bioconcentration factor (BCF)

No information.

12.4 Mobility in soil**Known or predicted distribution to environmental compartments**

No information.

Surface tension

No information.

Adsorption/Desorption

No information.

12.5 Results of PBT and vPvB assessment

No evaluation.

12.6 Other adverse effects

No information.

12.7 Additional information**For product**

No ecotoxicological data available. Do not allow uncontrolled discharge of product into the environment. Negative effects on aquatic environment are possible due to changes in pH-value. A low pH-value harms aquatic organisms. Water hazard class 2 (self-assessment): hazardous for water.

SECTION 13: DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods**Product / Packaging disposal****Waste chemical**

Do not allow product to reach drains/sewage systems. Dispose of in accordance with applicable waste disposal regulation. Disposal must be made according to official regulations: deliver it to authorised collector/remover/transformer of hazardous waste.

Waste codes / waste designations according to LoW

18 01 06* - chemicals consisting of or containing dangerous substances

20 01 14* - acids

Packaging

Dispose of in accordance with applicable waste disposal regulation. Deliver completely emptied containers to approved waste disposal authorities. Uncleaned containers are classified as hazardous waste - they should be handled in the same manner as the contents. Cleaned uncontaminated packaging may be taken for recycling.

Waste codes / waste designations according to LoW

15 01 10* - packaging containing residues of or contaminated by dangerous substances

Waste treatment-relevant information

No information.





Sewage disposal-relevant information

No information.

Other disposal recommendations

No information.

SECTION 14: TRANSPORT INFORMATION

ADR/RID	IMDG	IATA	ADN
14.1 UN number			
UN 1760	UN 1760	UN 1760	UN 1760
14.2 UN proper shipping name			
CORROSIVE LIQUID, N.O.S. (etidronic acid, hydrochloric acid)	CORROSIVE LIQUID, N.O.S. (etidronic acid, hydrochloric acid)	CORROSIVE LIQUID, N.O.S. (etidronic acid, hydrochloric acid)	CORROSIVE LIQUID, N.O.S. (etidronic acid, hydrochloric acid)
14.3 Transport hazard class(es)			
8	8	8	8
			
14.4 Packing group			
II	II	II	II
14.5 Environmental hazards			
NO	NO	NO	NO
14.6 Special precautions for user			

Limited quantities 1 L Special provisions 274 Packing Instructions P001, IBC02 Transport category 2 Tunnel restriction code (E)	Limited quantities 1 L EmS F-A, S-B	Limited Quantity, Packing Instructions (Ltd Qty, Pkg Inst) Y840 Limited Quantity, Maximum Net Quantity/Package (Ltd Qty, Max Net Qty/Pkg) 0.5 L Packing Instructions (Pkg Inst) 851 Maximum Net Quantity/Package (Max Net Qty/Pkg) 1 L Cargo Aircraft Only, Packing Instructions (CAO, Pkg Inst) 855 Cargo Aircraft Only, Maximum Net Quantity/Package (CAO, Max Net Qty/Pkg) 30 L Special provisions A803 Excepted quantities E2 ERG code 8L	Limited quantities 1 L
14.7 Transport in bulk according to Annex II of Marpol and the IBC Code			
Goods may not be carried in bulk in bulk containers, containers or vehicles.	Goods may not be carried in bulk in bulk containers, containers or vehicles.	Not given/not applicable	Not given/not applicable

SECTION 15: REGULATORY INFORMATION

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

- Regulation (EC) No 1907/2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH) (including last amendment Commission Regulation (EU) 2015/830)
- Regulation (EC) No 1272/2008 on classification, labelling and packaging of substances and mixtures

Information according 2004/42/EC about limitation of emissions of volatile organic compounds (VOC-guideline)
not applicable

Regulation EC 648/2004 on detergents

No information.

Special instructions

Observe the regulations on employment and protection against dangerous substances for young people, pregnant women and nursing mothers.

15.2 Chemical Safety Assessment

A Chemical Safety Assessment has not been carried out.

SECTION 16: OTHER INFORMATION

Indication of changes

8.1 Control parameters 9.1 Information on basic physical and chemical properties 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture

Key literature references and sources for data

MSDS, SpaBalancer pH-Minus, 20.7.2017, ver. 01

Abbreviations and acronyms

ATE - Acute Toxicity Estimate
ADR - Agreement concerning the International Carriage of Dangerous Goods by Road
ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
CEN - European Committee for Standardisation
C&L - Classification and Labelling
CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
CAS# - Chemical Abstracts Service number
CMR - Carcinogen, Mutagen, or Reproductive Toxicant
CSA - Chemical Safety Assessment
CSR - Chemical Safety Report
DMEL - Derived Minimal Effect Level
DNEL - Derived No Effect Level
DPD - Dangerous Preparations Directive 1999/45/EC
DSD - Dangerous Substances Directive 67/548/EEC
DU - Downstream User
EC - European Community
ECHA - European Chemicals Agency
EC-Number - EINECS and ELINCS Number (see also EINECS and ELINCS)
EEA - European Economic Area (EU + Iceland, Liechtenstein and Norway)
EEC - European Economic Community
EINECS - European Inventory of Existing Commercial Substances
ELINCS - European List of notified Chemical Substances
EN - European Standard
EQS - Environmental Quality Standard
EU - European Union
Euphrac - European Phrase Catalogue
EWC - European Waste Catalogue (replaced by LoW – see below)
GES - Generic Exposure Scenario
GHS - Globally Harmonized System
IATA - International Air Transport Association
ICAO-TI - Technical Instructions for the Safe Transport of Dangerous Goods by Air
IMDG - International Maritime Dangerous Goods
IMSBC - International Maritime Solid Bulk Cargoes
IT - Information Technology
IUCLID - International Uniform Chemical Information Database
IUPAC - International Union for Pure Applied Chemistry
JRC - Joint Research Centre
Kow - octanol-water partition coefficient
LC50 - Lethal Concentration to 50 % of a test population
LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose)
LE - Legal Entity
LoW - List of Wastes (see <http://ec.europa.eu/environment/waste/framework/list.htm>)
LR - Lead Registrant
M/I - Manufacturer / Importer
MS - Member States
MSDS - Material Safety Data Sheet
OC - Operational Conditions
OECD - Organization for Economic Co-operation and Development
OEL - Occupational Exposure Limit
OJ - Official Journal
OR - Only Representative
OSHA - European Agency for Safety and Health at work
PBT - Persistent, Bioaccumulative and Toxic substance
PEC - Predicted Effect Concentration
PNEC(s) - Predicted No Effect Concentration(s)
PPE - Personal Protection Equipment
(Q)SAR - Qualitative Structure Activity Relationship
REACH - Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
RID - Regulations concerning the International Carriage of Dangerous Goods by Rail
RIP - REACH Implementation Project
RMM - Risk Management Measure
SCBA - Self-Contained Breathing Apparatus
SDS - Safety data sheet

SIEF - Substance Information Exchange Forum
SME - Small and Medium sized Enterprises
STOT - Specific Target Organ Toxicity
(STOT) RE - Repeated Exposure
(STOT) SE - Single Exposure
SVHC - Substances of Very High Concern
UN - United Nations
vPvB - Very Persistent and Very Bioaccumulative

List of relevant H phrases

H290 May be corrosive to metals.
H302 Harmful if swallowed.
H314 Causes severe skin burns and eye damage.
H318 Causes serious eye damage.
H335 May cause respiratory irritation.