Safety data sheet

according to Regulation (EC) No. 1907/2006

PH DECREASE / PH-Minus

Version number: GHS 1.0 Date of creation: 08.08.2020

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

1.1 Product identifier

Name of the substance	Citric acid
Trade name	**PH DECREASE / PH-Minus**
Registration number (REACH)	01-2119457026-42-xxx
EINECS number	201-069-1
CAS number	77-92-9
Other designations	
Product number	PHDEF

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

Relevant identified uses	Uses by consumers Lowering the pH value in marine or freshwater aquariums

1.3 Details of the supplier of the safety data sheet

ARKA Biotechnologie GmbH
Mühllach 53-55 90552
Röthenbach Germany

Phone: +49 (0)911 5698610 00
Fax: +49 (0)911 5698610 29
e-mail (knowledgeable person) info@arka-biotech.de

1.4 Emergency number

Emergency information service	Poison control center Munich Available by phone 24h / 7 days a week Phone: +49 (0)89 19240

SECTION 2: Hazards identification

2.1 Classification of the substance or mixture

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

Section	Hazard class	Categorie	Hazard class and category	Hazard warning
3.3	Serious eye damage/eye irritation	Cat. 2	(Eye Irrit. 2)	H319

Notes

Full text of H-phrases in SECTION 16.

2.2 Labeling elements

Labeling according to Regulation (EC) No. 1272/2008 (CLP)

Signal word Attention

Pictograms

GHS07

Hazard warnings

H319Causes serious eye irritation.

Safety instructions Safety instructions

- General

P101If medical advice is needed, have product container or label at hand.
P102Keep out of the reach of children.

Safety instructions - Prevention

P264Wash hands thoroughly after handling.
P280 Wear protective gloves/protective clothing/eye protection/face protection.

Safety instructions - Reaction

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove any contact lenses if possible. Continue rinsing.
P337+P313If eye irritation persists: Get medical advice/attention.

Hazardous substances for labeling **Citric** acid

2.3 Other dangers

No additional information is available.

SECTION 3: Composition/information on ingredients

3.1 Substances / Mixture

Substance name	Citric acid
Index no.	not available
Registration number (REACH)	01-2119457026-42-xxx
EINECS number	201-069-1
CAS number	77-92-9
Content of the mixture	25-50%

SECTION 4: First aid measures

4.1 Description of first aid measures General notes

Remove soiled, soaked clothing immediately. If symptoms occur or in case of doubt, seek medical advice. If unconscious, place in recovery position and do not administer anything by mouth.

After inhalation

Provide fresh air. Consult a doctor if symptoms persist.

After contact with the skin

Wash skin with water/shower. After extensive contamination: seek medical treatment.

After contact with the eyes

Keep eyelids open and rinse thoroughly with clean, running water for at least 15 minutes. Remove any contact lenses if possible. Continue rinsing. Consult a doctor.

After ingestion by swallowing

DO NOT induce vomiting. See a doctor.

4.2 Most important symptoms and effects, both acute and delayed

Irritant effects. Conjunctivitis (inflammation of the conjunctiva).

4.3 Information on immediate medical assistance or special treatment

No information available.

SECTION 5: Fire-fighting measures

5.1 Extinguishing agent

Suitable extinguishing agents

Water, foam, alcohol-resistant foam, ABC powder. Adapt extinguishing measures to the surrounding area.

Unsuitable extinguishing agents

None

5.2 Special hazards arising from the substance or mixture

No further relevant information available.

Hazardous combustion products

No further relevant information available.

5.3 Instructions for firefighting

Fight the fire with the usual precautions from an appropriate distance. Stay in the danger zone only with self-contained breathing apparatus. Avoid skin contact by maintaining a safe distance or wearing suitable protective clothing. Collect contaminated extinguishing water separately.
Do not allow extinguishing water to enter sewers and bodies of water.

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Staff not trained for emergencies

Avoid contact with skin and eyes. Ensure good ventilation.

Emergency services

Respiratory protective equipment must be worn when exposed to vapors, dusts, aerosols and gases.
Personal protective equipment: see section 8.

6.2 Environmental protection measures

Prevent the product from entering the sewage system or surface and ground water.

6.3 Methods and material for retention and cleaning

Instructions on how to prevent spilled materials from spreading

Cover the drainage systems. Observe possible material restrictions! (Information in section 7 or 10). Pick up mechanically.

Further information on spillage and release

Dispose of in suitable containers.

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 Protective measures for safe handling

Recommendations

Advice on general hygiene in the workplace

Wash hands after use. Do not eat, drink or smoke in areas where work is being carried out. Remove contaminated clothing and protective equipment before entering areas where food is eaten. Do not store food and drinks together with chemicals. Do not use containers for chemicals that are normally intended for holding food. Keep away from food, drinks and animal feed.

7.2 Conditions for safe storage, taking into account incompatibilities

Keep container tightly closed. Store in a dry place.

Incompatible substances or mixtures

Observe storage instructions.

7.3 Specific end uses

See section 1.2.

SECTION 8: Exposure controls/personal protective equipment

8.1 Parameters to be monitored

National limit values

Occupational exposure limits (occupational exposure limits)

The product does not contain any relevant quantities of substances with limit values to be monitored at the workplace.

Exposure controls and monitoring

8.2.1 General protective and hygiene measures

Keep away from food, drink and animal feed.

Wash hands before breaks and at the end of work.

Avoid contact with eyes and skin.

8.2.2 Individual protective measures (personal protective equipment)

Eye/face protection

Wear safety goggles/face protection.

Skin protection

Wear protective clothing. Remove contaminated clothing and wash before reuse.

Hand protection

Wear protective gloves.

Type of material

Butyl rubber

Material thickness

0.6 mm.

Breakthrough time of the glove material

>480 minutes (permeation level: 6)

Other protective measures

The selection of a suitable glove depends not only on the material, but also on other quality features and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of glove materials cannot be calculated in advance and must therefore be checked before use. Wash hands thoroughly after use.

Respiratory protection

Not required.

8.2.3 Limiting and monitoring environmental exposure

Prevent penetration into the sewage lization or into surface and ground water.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties Appearance

Physical state	liquid
color	yellowish
Odor	Mild odor

Other physical and chemical parameters

pH value	2 - 5,0
Melting point/freezing point	not determined
Initial boiling point and boiling range	100°C
Flash point	not applicable
Evaporation ratenot	determined
Flammability (solid, gaseous)	not flammable
Explosion limits of dust/air mixtures	not determined
Vapor pressurenot	determined
Density	1,08
Bulk density	not applicable

Solubility(ies)	
Water solubility	99%
Partition coefficient	
n-octanol/water (log KOW)	no information available not
Auto-ignition temperature	self-igniting
Viscosity	liquid
Explosive properties	none
Oxidizing properties	none

9.2 Other information

No data is available.

SECTION 10: Stability and reactivity

10.1 Reactivity

No further relevant information available.

10.2 Chemical stability

No decomposition when used as intended.

10.3 Possibility of hazardous reactions

No dangerous reactions known.

10.4 Conditions to avoid

No further relevant information available.

10.5 Incompatible materials

No further relevant information available.

10.6 Hazardous decomposition products

Reasonably anticipated hazardous decomposition products formed during use, storage, spillage and heating are not known. Hazardous combustion products: see section 5.

SECTION 11: Toxicological information

11.1 Information on toxicological effects

Classification according to GHS (1272/2008/EC, CLP) Acute toxicity

Causes serious eye irritation.

Corrosive/irritant effect on the skin

May irritate the skin on prolonged contact.

Serious eye damage/eye irritation

Causes serious eye irritation.

Sensitization of the respiratory tract or skin

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

Summary of the assessment of CMR properties

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

Specific target organ toxicity (STOT)

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

Aspiration hazard

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

Other information

Further hazardous properties cannot be excluded. The usual precautionary measures for handling chemicals must be observed. The usual precautionary measures for handling chemicals must be observed.

SECTION 12: Environmental information

12.1 Toxicity

Water hazard class (WGK; Germany): 1 (Self-assessment): slightly hazardous to

water.

Do not allow undiluted product or large quantities of it to enter the sewage system.

12.2 Bioaccumulative potential

Not applicable.

12.3 Mobility in soil

No data is available.

12.4 Results of the PBT and vPvB assessment

Not applicable.

12.5 Other harmful effects

Avoid release into the environment.

SECTION 13: Disposal instructions

13.1 Waste treatment processes

Product residues must be disposed of in accordance with the Waste Directive 2008/98/EC and national and regional regulations .

Information relevant for waste treatment

Store only in the original container.

Information relevant for disposal via wastewater

Do not allow to enter drains.

Waste treatment of containers/packaging

Completely emptied packaging can be recycled.
Contaminated packaging must be treated in the same way as the substance.

Notes

Please observe the relevant national or regional regulations. Waste must be separated in such a way that it can be treated separately by the municipal or national waste disposal facilities.

SECTION 14: Transport information

14.1	**UN number**	No dangerous goods as defined by national and international transport regulations (not subject to transport regulations)
14.2	**UN proper shipping name**	Not applicable
14.3	**Transport hazard classes** Class	 Not applicable
14.4	**Packaging group**	not relevant
14.5	**Environmental hazards**	none (not hazardous to the environment according to dangerous goods regulations)

14.6 Special precautions for the user

Not applicable.

14.7 Transport in bulk according to Annex II of MARPOL and the IBC Code

Not applicable.

SECTION 15: Legislation

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

Labeling according to Regulation (EC) No. 1272/2008

The product is classified and labeled according to the CLP regulation (see section 2)

Hazard warnings

H319Causes serious eye irritation

Safety instructions

P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove any contact lenses if possible. Continue rinsing.
P337+P313If eye irritation persists: Get medical advice/attention.

Water hazard class

WGK 1 (self-classification) slightly hazardous to water

15.2 Chemical safety assessment

No chemical safety assessment has been carried out for this substance.

SECTION 16: Other information

Abbreviations and acronyms

Abbr.	Descriptions of the abbreviations used
ADR	Accord européen relatif au transport international des marchandises dangereuses par route (European Agreement concerning the International Carriage of Dangerous Goods by Road)
AGW	Occupational exposure limit
CAS	Chemical Abstracts Service (database of chemical compounds and their unique key, the CAS Registry Number)
CLP	Regulation (EC) No. 1272/2008 on classification, labeling and packaging of substances and mixtures
CMR	Carcinogenic, Mutagenic or toxic for Reproduction (carcinogenic, mutagenic or toxic for reproduction)
DFG	German Research Foundation List of MAK and BAT values, Senate Commission for the Examination of Health Hazardous Substances, Wiley-VCH, Weinheim
DMEL	Derived minimal effect level (derived exposure level with minimal impairment)
DNEL	Derived No-Effect Level (derived exposure level without impairment)
GHS	"Globally Harmonized System of Classification and Labelling of Chemicals" "Globally Harmonized System of Classification and Labelling of Chemicals" developed by the United Nations
Index no.	The index number is the identification code given in Part 3 of Annex VI to Regulation (EC) No 1272/2008.
KZW	Short-term value
LGK	Storage class according to TRGS 510, Germany
MARPOL	International Convention for the Prevention of Pollution from Ships (abbreviation of "Marine Pollu- tant")
PBT	Persistent, Bioaccumulative and Toxic
PNEC	Predicted No-Effect Concentration (estimated no-effect concentration)
ppm	Parts per million (parts per million)
REACH	Registration, Evaluation, Authorization and Restriction of Chemicals (Registration, Evaluation, Authorization and Restriction of Chemicals)
SMW	Shift average
TRGS	Technical Rules for Hazardous Substances (Germany)
TRGS 900	Occupational exposure limits (TRGS 900)
VbF	Ordinance on flammable liquids (Austria)
vPvB	Very Persistent and very Bioaccumulative (very persistent and very bioaccumulative)

Important literature and data sources

- Regulation (EC) No. 1907/2006 (REACH), amended by 2015/830/EU
- Regulation (EC) No. 1272/2008 (CLP, EU-GHS)

List of relevant phrases (code and wording as indicated in chapters 2 and 3)

Code	Text
H319	Causes serious eye irritation.

Disclaimer

This information is based on our current knowledge. This SDS has been compiled exclusively for this product and is intended solely for this product.