

Safety data sheet
according to 1907/2006/EC, Article 31

Printing date 06.05.2020

Version number 2

Revision: 06.04.2020

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

- **1.1 Product identifier**
- **Product name: Acidifying GP**
- **Catalog number:** 136250-GPT
- **Additional article numbers:** 125100-GTP, 125250-GTP
- **1.2 Relevant identified uses of the substance or mixture and uses advised against**
- **Application of the substance / the preparation:** Reagent for water analysis
- **1.3 Details of the supplier of the safety data sheet**
- **Supplier:**
GoPoolTest GmbH
Opelstraße 1
68789 St. Leon-Rot
Made in Germany
www.gopooltest.com
- **Informing department:**
e-mail: produktsicherheit@gopooltest.com
Product Safety Department
- **Contact for technical details:**
Technical Department
e-mail: technik@gopooltest.com
- **1.4 Emergency telephone number:**
+44 1235 239670
Languages: English

Tel.: +49/(0) 6227-877-340
E-Mail: sales@gopooltest.com

SECTION 2: Hazards identification

- **2.1 Classification of the substance or mixture**
- **Classification according to Regulation (EC) No 1272/2008**



Eye Irrit. 2 H319 Causes serious eye irritation.

- **2.2 Label elements**
- **Labelling according to Regulation (EC) No 1272/2008** The product is classified and labelled according to the CLP regulation.
- **Hazard pictograms**



- **Signal word** Warning
- **Hazard statements**
H319 Causes serious eye irritation.
- **Precautionary statements**
P264 Wash thoroughly after handling.
P280 Wear eye protection / face protection.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P337+P313 If eye irritation persists: Get medical advice/attention.
- **2.3 Other hazards** No further relevant information available.

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Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB), according to the criteria given in Annex XIII of Regulation (EC) No. 1907/2006.

SECTION 3: Composition/information on ingredients

3.2 Mixtures

Description: Mixture contains organic compounds.

Dangerous components:

CAS: 77-92-9 EINECS: 201-069-1 Reg.nr.: 01-2119457026-42-XXXX	citric acid	⚠ Eye Irrit. 2, H319	50-60%
CAS: 124-04-9 EINECS: 204-673-3 Index No: 607-144-00-9 Reg.nr.: 01-2119457561-38-XXXX	adipic acid	⚠ Eye Irrit. 2, H319	25-35%

Additional information For the wording of the listed hazard phrases refer to section 16.

SECTION 4: First aid measures

4.1 Description of first aid measures

General information Instantly remove any clothing soiled by the product.

After inhalation Supply fresh air; consult doctor in case of symptoms.

After skin contact

Instantly rinse with water.

If skin irritation continues, consult a doctor.

After eye contact Rinse opened eye for several minutes (at least 15 min) under running water. Then consult doctor.

After swallowing

Rinse out mouth and then drink 1-2 glasses of water.

In case of persistent symptoms consult doctor.

4.2 Most important symptoms and effects, both acute and delayed:

irritations

after inhalation:

coughing

mucous membrane irritation

after swallowing of large amounts:

gastric or intestinal trouble

vomiting

pain

4.3 Indication of any immediate medical attention and special treatment needed: No further relevant information available.

SECTION 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing agents Use fire fighting measures that suit the environment.

5.2 Special hazards arising from the substance or mixture

combustible

Formation of toxic gases is possible during heating or in case of fire.

Can be released in case of fire:

Sulphur oxides (SO_x)

Nitrogen oxides (NO_x)

Sodium oxide

Carbon monoxide (CO) and carbon dioxide (CO₂)

5.3 Advice for firefighters
Protective equipment:

Wear self-contained breathing apparatus.

Wear full protective suit.

Additional information

Collect contaminated fire fighting water separately. It must not enter drains.

Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.

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Ambient fire may liberate hazardous vapours.

SECTION 6: Accidental release measures

- **6.1 Personal precautions, protective equipment and emergency procedures**
- **Advice for non-emergency personnel:**
Wear protective equipment. Keep unprotected persons away.
Ensure adequate ventilation
- **Advice for emergency responders:** Protective equipment: see section 8
- **6.2 Environmental precautions:** Do not allow product to reach sewage system or water bodies.
- **6.3 Methods and material for containment and cleaning up:**
Ensure adequate ventilation.
Collect mechanically.
Dispose of contaminated material as waste according to item 13.
- **6.4 Reference to other sections**
See Section 8 for information on personal protection equipment.
See Section 13 for information on disposal.

SECTION 7: Handling and storage

- **7.1 Precautions for safe handling**
- **Advice on safe handling:** Prevent formation of dust.
- **Hygiene measures:**
Avoid contact with the eyes.
Take off immediately all contaminated clothing.
Wash hands during breaks and at the end of the work.
Do not eat, drink or smoke when using this product.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage**
- **Requirements to be met by storerooms and containers:** Store in cool location.
- **Information about storage in one common storage facility:** Store away from oxidising agents.
- **Further information about storage conditions:**
Protect from heat and direct sunlight.
Protect from the effects of light.
Store under dry conditions.
Protect from humidity and keep away from water.
- **Recommended storage temperature:** 20°C +/- 5°C
- **7.3 Specific end use(s)** No further relevant information available.

* SECTION 8: Exposure controls/personal protection

- **8.1 Control parameters**
- **Components with limit values that require monitoring at the workplace:**
The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.
- **DNELs**
Derived No Effect Level (DNEL)

CAS: 124-04-9 adipic acid		
Oral	DNEL	19 mg/kg (Consumer / acute / systemic effects)
		19 mg/kg (Consumer / long-term / systemic effects)
Dermal	DNEL	38 mg/kg (Worker / acute / systemic effects)
		38 mg/kg (Worker / long-term / systemic effects)
		19 mg/kg (Consumer / acute / systemic effects)
		19 mg/kg (Consumer / long-term / systemic effects)
Inhalative	DNEL	5 mg/m ³ (Worker / acute / local effects)
		264 mg/m ³ (Worker / acute / systemic effects)
		5 mg/m ³ (Worker / long-term / local effects)
		264 mg/m ³ (Worker / long-term / systemic effects)

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		65 mg/m ³ (Consumer / acute / systemic effects)
		65 mg/m ³ (Consumer / long-term / systemic effects)

- **Recommended monitoring procedures:**

Methods for measurement of the workplace atmosphere have to correspond to the requirements of norms DIN EN 482 and DIN EN 689.

- **PNECs**

Predicted No Effect Concentration (PNEC)

CAS: 124-04-9 adipic acid	
PNEC	59.1 mg/l (Sewage treatment plant)
	0.0126 mg/l (Marine water)
	0.46 mg/l (Aquatic intermittent release)
	0.126 mg/l (Fresh water)
PNEC	0.0228 mg/kg (Soil)
	0.0484 mg/kg (Marine sediment)
	0.484 mg/kg (Fresh water sediment)

- **Additional information:** The lists that were valid during the compilation were used as basis.

- **8.2 Exposure controls**

- **Engineering measures:**

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment. See item 7.

- **Personal protective equipment**

Protective clothing should be selected specifically for the workplace, depending on concentration and quantity of the hazardous substances handled.

- **Breathing equipment:** Use breathing protection against the effects of fumes/dust/aerosol.

- **Recommended filter device for short term use:** Filter P2

- **Protection of hands:**

Protective gloves.

Preventive skin protection by use of skin-protecting agents is recommended.

After use of gloves apply skin-cleaning agents and skin cosmetics.

- **Material of gloves**

nitrile rubber, NBR

Recommended thickness of the material: ≥ 0.11 mm

- **Penetration time of glove material**

Value for the permeation: Level = 1 (< 10 min)

The exact break through time has to be found out by the manufacturer of the protective gloves and has to be observed.

- **Eye protection:** Safety glasses

- **Body protection:** Protective work clothing.

- **Limitation and supervision of exposure into the environment:**

Do not allow product to reach sewage system or water bodies.

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties	
• Appearance:	
Form / Physical state:	Tablets
Colour:	White
• Odour: Odourless	
• Odour threshold:	Not applicable
• pH-value (9.5 g/l) at 20°C:	2.4
• Melting point/Freezing point:	Not determined
• Initial boiling point and boiling range:	Not determined
• Flash point:	196°C (CAS 124-04-9)
• Flammability (solid, gas):	Not determined.
• Decomposition temperature:	153°C (CAS 77-92-9)

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· Auto-ignition temperature:	Product is not self-igniting.
· Explosive properties:	The product is not capable of dust explosion in the form supplied; enrichment with fine dust causes risk of dust explosion
· Flammability or explosive limits:	
Lower:	Not determined.
Upper:	Not determined.
· Oxidising properties:	none
· Vapour pressure:	Not applicable.
· Density at 20°C:	1.46 g/cm ³
· Relative density:	Not determined.
· Vapour density:	Not applicable.
· Evaporation rate:	Not applicable.
· Solubility(ies):	
Water:	Soluble
· Partition coefficient: n-octanol/water:	Not applicable.
· Viscosity:	Not applicable.
· Solvent content:	
Organic solvents:	0.0 %
Solids content:	100.0 %
· 9.2 Other information	No further relevant information available.

SECTION 10: Stability and reactivity

- **10.1 Reactivity** Dust can combine with air to form an explosive mixture.
- **10.2 Chemical stability** Stable at ambient temperature (room temperature).
- **10.3 Possibility of hazardous reactions**
 Aqueous solution reacts acidic.
 Aqueous solution reacts with metals.
 Reacts with reducing agents
 Reacts with alkali (lyes)
 Reacts with oxidizing agents
 Reacts with certain metals
 Citric acid: incompatible with bases, strong oxidizers, amines. Contact with metal nitrates may be explosive. Attacks aluminum, copper, zinc und their alloys, when wet.
- **10.4 Conditions to avoid** strong heating
- **10.5 Incompatible materials:**
 metals
 steel
 aluminium, copper, zinc, metal ions
 combustible substances
- **10.6 Hazardous decomposition products:** see section 5

SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**
- **Acute toxicity** Based on available data, the classification criteria are not met.

· **LD/LC50 values that are relevant for classification:**

CAS: 77-92-9 citric acid		
Oral	LD50	3000 mg/kg (rat) (IUCRID)
Dermal	LD50.	>2000 mg/kg (rat) (limit test: there were no deaths)

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CAS: 124-04-9 adipic acid		
Oral	LD50	5700 mg/kg (rat) (MERCK)
Dermal	LD50	>7940 mg/kg (rabbit) (Registrant, ECHA: no deaths occurred)
Inhalative	LC50	>7.7 mg/l/4h (rat) (dust, aerosol) (Registrant, ECHA: no deaths occurred)

- **Primary irritant effect:**

- **Skin corrosion/irritation** Based on available data, the classification criteria are not met.

- **Serious eye damage/irritation** Causes serious eye irritation.

- **Information on components:**

Citric acid: A single drop of a 2% or 5% solution in water causes little or no irritation.

A 0.5% solution held in contact with the eye causes irreversible tissue damage to the cornea.

Citric Acid caused mild irritation when 500 mg was tested on rabbit skin in a 24-hour test.

(CHEMINFO, Canadian Centre for Occupational Health and Safety)

CAS: 77-92-9 citric acid		
Irritation of skin	OECD 404	(rabbit: no irritation)
Irritation of eyes	OECD 405	(rabbit: severe irritations)
CAS: 124-04-9 adipic acid		
Irritation of skin	OECD 404	(rabbit: no irritation)
Irritation of eyes	OECD 405	(rabbit: severe irritations)

- **Respiratory or skin sensitisation** Based on available data, the classification criteria are not met.

- **Information on components:**

CAS: 77-92-9 citric acid		
Sensitisation	OECD 406	(guinea pig: negative) (EPA OPP 81-6: Guinea pig maximisation test)
CAS: 124-04-9 adipic acid		
Sensitisation	OECD 406	(guinea pig: negative) (IUCLID)

- **CMR effects (carcinogenicity, mutagenicity and toxicity for reproduction)** The following statements refer to the mixture:

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

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

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

- **STOT (specific target organ toxicity) -single exposure** Based on available data, the classification criteria are not met.

- **STOT (specific target organ toxicity) -repeated exposure** Based on available data, the classification criteria are not met.

- **Aspiration hazard** Based on available data, the classification criteria are not met.

- **Information on components:**

OECD 414: Teratogenicity testing

OECD 473: Mutagenicity testing

OECD 471, 474, 476, 487: Germ cell mutagenicity testing

CAS: 77-92-9 citric acid		
OECD 471	(negative)	(Bacterial Reverse Mutation Test - Ames test)
CAS: 124-04-9 adipic acid		
OECD 471	(negative)	(Bacterial Reverse Mutation Test - Ames test) (IUCLID)
OECD 474	(negative)	(Mammalian Erythrocyte Micronucleus Test)

- **Additional toxicological information:**

- **Experience with humans:** CAS 77-92-9: Can cause kidney damages.

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SECTION 12: Ecological information

· 12.1 Toxicity

· Aquatic toxicity:

CAS: 77-92-9 citric acid

EC50	~120 mg/l (Daphnia magna) (72 h) (IUCLID)
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EC5	485 mg/l (Entosiphon sulcatum) (72h) (MERCK)
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LC50	440–760 mg/l/96h (gold orfe) (IUCLID)
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CAS: 124-04-9 adipic acid

LC50	511 mg/l/48h (gold orfe)
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EC50	86 mg/l/48h (Daphnia magna) (OECD 202)
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IC50	31 mg/l/72h (Desmodosmus subspicatus) (IUCLID)
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LC50	97 mg/l/96h (fathhead minnow) (ECOTOX)
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· Bacterial toxicity:

CAS: 77-92-9 citric acid

EC5	>10000 mg/l (Pseudomonas putida) (16h (Lit.))
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CAS: 124-04-9 adipic acid

EC50	92 mg/l (Pseudomonas putida) (DIN 38412) (IUCLID)
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· 12.2 Persistence and degradability

CAS: 77-92-9 citric acid

OECD 301 B	97 % / 28 d (readily biodegradable) (CO2 Evolution Test)
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OECD 302 B	98 % / 2 d (readily eliminated from water) (Zahn-Wellens / EMPA Test)
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CAS: 124-04-9 adipic acid

OECD 301 B	100 % / 28 d (readily biodegradable) (CO2 Evolution Test)
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· 12.3 Bioaccumulative potential

Pow = n-octanol/wasser partition coefficient

log Pow < 1 = Does not accumulate in organisms.

CAS: 77-92-9 citric acid

log Pow	-1.72 (.) (OECD 117, 20°C)
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CAS: 124-04-9 adipic acid

log Pow	0.081 (.) (25°C, OECD 107)
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· 12.4 Mobility in soil

No further relevant information available.

· 12.5 Results of PBT and vPvB assessment

This mixture does not contain any substances that are assessed to be persistent, bioaccumulative and toxic (PBT) or very persistent and very bioaccumulative (vPvB), according to the criteria given in Annex XIII of Regulation (EC) No. 1907/2006.

· 12.6 Other adverse effects

Harmful effect due to pH shift.

Avoid transfer into the environment.

· Water hazard:

Do not allow product to reach ground water, water bodies or sewage system.

Danger to drinking water if even small quantities leak into soil.

SECTION 13: Disposal considerations

· 13.1 Waste treatment methods

· Recommendation

Must not be disposed of together with household garbage. Do not allow product to reach sewage system.

Hand over to disposers of hazardous waste.

· European waste catalogue

16 05 08*	discarded organic chemicals consisting of or containing hazardous substances
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- **Uncleaned packagings:**
- **Recommendation:** Disposal must be made according to official regulations.
- **Recommended cleaning agent:** Water, if necessary with cleaning agent.

SECTION 14: Transport information

<ul style="list-style-type: none"> · 14.1 UN-Number · ADR, IMDG, IATA 	Void
<ul style="list-style-type: none"> · 14.2 UN proper shipping name · ADR, IMDG, IATA 	Void
<ul style="list-style-type: none"> · 14.3 Transport hazard class(es) · ADR, IMDG, IATA · Class 	Void
<ul style="list-style-type: none"> · 14.4 Packing group · ADR, IMDG, IATA 	Void
<ul style="list-style-type: none"> · 14.5 Environmental hazards: 	Not applicable.
<ul style="list-style-type: none"> · 14.6 Special precautions for user 	Not applicable.
<ul style="list-style-type: none"> · 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code 	Not applicable.
<ul style="list-style-type: none"> · Transport/Additional information: 	Not dangerous according to the above specifications.

SECTION 15: Regulatory information

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

- **Regulation (EC) No 1005/2009 on substances that deplete the ozone layer:**

None of the ingredients is listed.

- **Directive 2012/18/EU (SEVESO III):**

- **Named dangerous substances - ANNEX I** None of the ingredients is listed.

- **Regulation (EU) No 649/2012**

None of the ingredients is listed.

- **National regulations**

- **Information about limitation of use:** Not required.

- **15.2 Chemical safety assessment:** A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

These data are based on our present knowledge. However, they shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

- **Relevant phrases**

H319 Causes serious eye irritation.

- **Training hints** Provide adequate information, instruction and training for operators.

- **Abbreviations and acronyms:**

OECD: Organisation for Economic Co-operation and Development

STOT: specific target organ toxicity

SE: single exposure

RE: repeated exposure

EC50: half maximal effective concentration

IC50: half maximal inhibitory concentration

NOEL or NOEC: No Observed Effect Level or Concentration

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

IMDG: International Maritime Code for Dangerous Goods

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IATA: International Air Transport Association
GHS: Globally Harmonised System of Classification and Labelling of Chemicals
EINECS: European Inventory of Existing Commercial Chemical Substances
ELINCS: European List of Notified Chemical Substances
CAS: Chemical Abstracts Service (division of the American Chemical Society)
DNEL: Derived No-Effect Level (REACH)
PNEC: Predicted No-Effect Concentration (REACH)
LC50: Lethal concentration, 50 percent
LD50: Lethal dose, 50 percent
PBT: Persistent, Bioaccumulative and Toxic
vPvB: very Persistent and very Bioaccumulative
Eye Irrit. 2: Serious eye damage/eye irritation – Category 2

• Sources

Data arise from safety data sheets, reference works and literature.
ECHA: European Chemicals Agency <http://echa.europa.eu>
IUCLID (International Uniform Chemical Information Database)
ECOTOX Database

• * Data compared to the previous version altered.

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