

SAFETY DATA SHEET

This safety data sheet was created pursuant to the requirements of: Regulation (EC) No. 1907/2006 and Regulation (EC) No. 1272/2008

Acidifying GP

Revision date 05-07-2024 Revision Number 1

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

1.1. Product identifier

Product Code(s) PPHAFG

Product Name Acidifying GP

Unique Formula Identifier (UFI) WYJT-DUQY-1W0J-4MWT

Pure substance/mixture

Contains Citric Acid

Mixture

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

Recommended use Conditioning reagent

Uses advised against Others

1.3. Details of the supplier of the safety data sheet

Manufacturer

Water-i.d. GmbH Daimlerstr. 20

76344 Eggenstein, Germany

Tel.: +49 (0) 721 78 20 29 0, Fax: +49 (0) 721 78 20 29 11

Website: www.water-id.com

EHS / Compliance: lab@water-id.com

1.4. Emergency telephone number

Emergency Telephone

| United Kingdom | +44 1235 239670 |
|----------------|-----------------|
| | English |

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No 1272/2008

| Serious eye damage/eye irritation | Category 2 - (H319) |
|--|---------------------|
| Specific target organ toxicity — single exposure | Category 3 - (H335) |
| Category 3 Respiratory irritation | |

2.2. Label elements

Contains Citric Acid



Signal word Warning

Hazard statements

H319 - Causes serious eye irritation

H335 - May cause respiratory irritation

Precautionary Statements - EU (§28, 1272/2008)

P261 - Avoid breathing dust/fume/gas/mist/vapours/spray

P264 - Wash face, hands and any exposed skin thoroughly after handling

P280 - Wear eye protection/ face protection

P312 - Call a POISON CENTER or doctor if you feel unwell

P403 + P233 - Store in a well-ventilated place. Keep container tightly closed

P501 - Dispose of contents/ container to an approved waste disposal plant

2.3. Other hazards

No information available.

SECTION 3: Composition/information on ingredients

3.1 Substances

Not applicable

3.2 Mixtures

| Chemical name | Weight-% | REACH registration | EC No (EU | Classification | Specific | M-Factor | M-Factor |
|------------------|----------|--------------------|-----------|---------------------|---------------|----------|-------------|
| | | number | Index No) | according to | concentration | | (long-term) |
| | | | | Regulation (EC) No. | limit (SCL) | | |
| | | | | 1272/2008 [CLP] | | | |
| Hexanedioic acid | 50-80 | No data available | 204-673-3 | Eye Irrit. 2 (H319) | | | |
| 124-04-9 | | | | | | | |
| Citric Acid | 30-50 | No data available | 201-069-1 | Eye Irrit. 2 (H319) | | | |
| 77-92-9 | | | | STOT SE 3 (H335) | | | |

Full text of H- and EUH-phrases: see section 16

Acute Toxicity Estimate

If LD50/LC50 data is not available or does not correspond to the classification category, then the appropriate conversion value from CLP Annex I, Table 3.1.2, is used to calculate the acute toxicity estimate (ATEmix) for classifying a mixture based on its components

| | Chemical name | Oral LD50 | Dermal LD50 | Inhalation LC50 - 4 | Inhalation LC50 - 4 | Inhalation LC50 - 4 |
|---|------------------------------|-----------|-------------|-------------------------|----------------------|---------------------|
| | | mg/kg | mg/kg | hour - dust/mist - mg/L | hour - vapour - mg/L | hour - gas - ppm |
| | Hexanedioic acid 124-04-9 | 11000 | 7940 | 7.7 | | |
| I | Citric Acid 77-92-9 | 3000 | 2000 | | | |

This product does not contain candidate substances of very high concern at a concentration >=0.1% (Regulation (EC) No.

1907/2006 (REACH), Article 59)

SECTION 4: First aid measures

4.1. Description of first aid measures

General advice Show this safety data sheet to the doctor in attendance.

Inhalation Remove to fresh air.

Eye contact Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes.

Remove contact lenses, if present and easy to do. Continue rinsing. Keep eye wide open while rinsing. Do not rub affected area. Get medical attention if irritation develops and

persists.

Skin contact Wash skin with soap and water. In the case of skin irritation or allergic reactions see a

doctor.

Ingestion Rinse mouth. Never give anything by mouth to an unconscious person. Do NOT induce

vomiting. Call a doctor.

Self-protection of the first aider Avoid contact with skin, eyes or clothing. Wear personal protective clothing (see section 8).

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

Symptoms May cause redness and tearing of the eyes. Burning sensation.

4.3. Indication of any immediate medical attention and special treatment needed

Note to doctorsTreat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

surrounding environment.

Large Fire CAUTION: Use of water spray when fighting fire may be inefficient.

Unsuitable extinguishing media Do not scatter spilled material with high pressure water streams.

5.2. Special hazards arising from the substance or mixture

Specific hazards arising from the

chemical

No information available.

5.3. Advice for firefighters

Special protective equipment and precautions for fire-fighters

Firefighters should wear self-contained breathing apparatus and full firefighting turnout

gear. Use personal protection equipment.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Personal precautions Avoid contact with skin, eyes or clothing. Use personal protective equipment as required.

Other information Refer to protective measures listed in Sections 7 and 8.

6.2. Environmental precautions

Environmental precautions See Section 12 for additional Ecological Information.

6.3. Methods and material for containment and cleaning up

Methods for containment Prevent further leakage or spillage if safe to do so.

Methods for cleaning up Take up mechanically, placing in appropriate containers for disposal.

Prevention of secondary hazards Clean contaminated objects and areas thoroughly observing environmental regulations.

6.4. Reference to other sections

Reference to other sections See section 8 for more information. See section 13 for more information.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling Handle in accordance with good industrial hygiene and safety practice. Avoid contact with

skin, eyes or clothing. Do not eat, drink or smoke when using this product.

General hygiene considerations Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do

not eat, drink or smoke when using this product.

7.2. Conditions for safe storage, including any incompatibilities

Storage Conditions Keep containers tightly closed in a dry, cool and well-ventilated place.

7.3. Specific end use(s)

Risk Management Methods (RMM) The information required is contained in this Safety Data Sheet.

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Exposure Limits

| Chemical name | European Union | Austria | Belgium | Bulgaria | Croatia |
|------------------------------|--|--------------------------|---|--------------------------|----------------------------|
| Hexanedioic acid 124-04-9 | - | - | TWA: 5 mg/m ³ | - | - |
| Chemical name | Cyprus | Czech Republic | Denmark | Estonia | Finland |
| Hexanedioic acid 124-04-9 | - | - | TWA: 5 mg/m ³ | - | TWA: 5 mg/m ³ |
| Citric Acid 77-92-9 | - | TWA: 4 mg/m ³ | - | - | - |
| Chemical name | France | Germany TRGS | Germany DFG | Greece | Hungary |
| Hexanedioic acid 124-04-9 | - | TWA: 2 mg/m ³ | TWA: 2 mg/m ³ Peak: 4 mg/m ³ | - | - |
| Citric Acid 77-92-9 | - | TWA: 2 mg/m ³ | TWA: 2 mg/m ³ Peak: 4 mg/m ³ | - | - |
| Chemical name | Ireland | Italy MDLPS | Italy AIDII | Latvia | Lithuania |
| Hexanedioic acid 124-04-9 | TWA: 5 mg/m ³ STEL: 15 mg/m ³ | - | TWA: 5 mg/m ³ | TWA: 4 mg/m ³ | TWA: 4 mg/m ³ |
| Chemical name | Luxembourg | Malta | Netherlands | Norway | Poland |
| Hexanedioic acid | - | - | - | - | STEL: 10 mg/m ³ |

| 124-04-9 | | | | | | | TWA: 5 mg/m ³ |
|------------------------------|----|------------------------|---------|---|-----|----------------------|--------------------------|
| Chemical name | | Portugal | Romania | Slovakia | Slo | venia | Spain |
| Hexanedioic acid 124-04-9 | TW | A: 5 mg/m ³ | - | - | | 2 mg/m³ TEL mg/m³ | TWA: 5 mg/m ³ |
| Chemical name | | Sı | weden | Switzerland | | Uni | ted Kingdom |
| Hexanedioic acid 124-04-9 | | | - | TWA: 3 mg/m ³ STEL: 6 mg/m ³ | | | - |
| Citric Acid 77-92-9 | | | - | TWA: 2 mg/m ³ STEL: 4 mg/m ³ | | | - |

Biological occupational exposure limits

This product, as supplied, does not contain any hazardous materials with biological limits established by the region specific regulatory bodies

Derived No Effect Level (DNEL)
Predicted No Effect Concentration
(PNEC)

No information available.

8.2. Exposure controls

Personal protective equipment

Eye/face protection If splashes are likely to occur, wear safety glasses with side-shields.

Hand protection Wear suitable gloves.

Skin and body protectionWear suitable protective clothing.

Respiratory protection No protective equipment is needed under normal use conditions. If exposure limits are

exceeded or irritation is experienced, ventilation and evacuation may be required.

General hygiene considerations Avoid contact with skin, eyes or clothing. Wear suitable gloves and eye/face protection. Do

not eat, drink or smoke when using this product.

Environmental exposure controls No information available.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state Solid
Appearance Powder
Colour white
Odour Odourless.

Odour threshold

Property Values Remarks • Method

Melting point / freezing pointNo data availableNone knownBoiling point / boiling rangeNo data availableNone knownFlammability (solid, gas)No data availableNone knownFlammability Limit in AirNone known

Upper flammability or explosive No data available

limits

Lower flammability or explosive No data available

limits

Flash pointNo data availableNone knownAutoignition temperatureNo data availableNone knownDecomposition temperatureNone known

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pH
 pH (as aqueous solution)
 No data available
 No data available
 No information available

Kinematic viscosity No data available None known **Dynamic viscosity** No data available None known Water solubility No data available None known No data available Solubility(ies) None known No data available None known Partition coefficient No data available None known Vapour pressure No data available None known

Relative density

Bulk density

No data available
No data available
Liquid Density

No data available

Relative vapour density

No data available

None known

Particle characteristics

Particle Size

Particle Size Distribution

9.2. Other information

9.2.1. Information with regards to physical hazard classes Not applicable

9.2.2. Other safety characteristics

SECTION 10: Stability and reactivity

10.1. Reactivity

Reactivity No information available.

10.2. Chemical stability

Stability Stable under normal conditions.

Explosion data

Sensitivity to mechanical impact None. **Sensitivity to static discharge** None.

10.3. Possibility of hazardous reactions

Possibility of hazardous reactions None under normal processing.

10.4. Conditions to avoid

Conditions to avoid None known based on information supplied.

10.5. Incompatible materials

Incompatible materialsNone known based on information supplied.

10.6. Hazardous decomposition products

Hazardous decomposition products None known based on information supplied.

SECTION 11: Toxicological information

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

Information on likely routes of exposure

Product Information

Inhalation Specific test data for the substance or mixture is not available. May cause irritation of

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respiratory tract.

Eye contact Specific test data for the substance or mixture is not available. Causes serious eye irritation.

(based on components). May cause redness, itching, and pain.

Skin contact Specific test data for the substance or mixture is not available. May cause irritation.

Prolonged contact may cause redness and irritation.

Ingestion Specific test data for the substance or mixture is not available. Ingestion may cause

gastrointestinal irritation, nausea, vomiting and diarrhoea.

Symptoms related to the physical, chemical and toxicological characteristics

Symptoms May cause redness and tearing of the eyes.

Numerical measures of toxicity

Acute toxicity

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral) 5,430.50 mg/kg ATEmix (dermal) 3,706.40 mg/kg ATEmix (inhalation-dust/mist) 7.70 mg/l

0 % of the mixture consists of ingredient(s) of unknown acute oral toxicity.

0 % of the mixture consists of ingredient(s) of unknown acute dermal toxicity.

100 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (gas).

100 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (vapour).

38.46 % of the mixture consists of ingredient(s) of unknown acute inhalation toxicity (dust/mist).

Component Information

| Chemical name | Oral LD50 | Dermal LD50 | Inhalation LC50 |
|------------------|---------------------|-----------------------|----------------------|
| Hexanedioic acid | > 11000 mg/kg (Rat) | > 7940 mg/kg (Rabbit) | > 7700 mg/m³(Rat)4 h |
| Citric Acid | = 3 g/kg (Rat) | > 2000 mg/kg (Rat) | |

Delayed and immediate effects as well as chronic effects from short and long-term exposure

Skin corrosion/irritation May cause skin irritation.

Serious eye damage/eye irritation Classification based on data available for ingredients. Causes serious eye irritation.

Respiratory or skin sensitisation No information available.

Germ cell mutagenicity No information available.

Carcinogenicity No information available.

Reproductive toxicity No information available.

STOT - single exposure No information available.

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STOT - repeated exposure

No information available.

Aspiration hazard

No information available.

11.2. Information on other hazards

11.2.1. Endocrine disrupting properties

Endocrine disrupting properties

11.2.2. Other information

Other adverse effects

SECTION 12: Ecological information

12.1. Toxicity

Ecotoxicity

Unknown aquatic toxicity

Contains 0 % of components with unknown hazards to the aquatic environment.

| Chemical name | Algae/aquatic plants | Fish | Toxicity to microorganisms | Crustacea |
|------------------|---|--|----------------------------|--|
| Hexanedioic acid | EC50: =26.6mg/L (96h, Desmodesmus subspicatus) EC50: =31.3mg/L (72h, Desmodesmus subspicatus) EC50: =35mg/L (96h, Desmodesmus subspicatus) EC50: =66mg/L (72h, Desmodesmus subspicatus) | LC50: =59.5mg/L (96h, Danio rerio) LC50: =97mg/L (96h, Pimephales promelas) | • | EC50: =85.7mg/L (48h, Daphnia magna) EC50: =88.4mg/L (48h, Daphnia magna) |
| Citric Acid | _ | LC50: =1516mg/L (96h, Lepomis macrochirus) | - | - |

12.2. Persistence and degradability

Persistence and degradability

12.3. Bioaccumulative potential

Bioaccumulation

There is no data for this product.

Component Information

| Chemical name | Partition coefficient |
|------------------|-----------------------|
| Hexanedioic acid | 0.093 |
| Citric Acid | -1.72 |

12.4. Mobility in soil

Mobility in soil

12.5. Results of PBT and vPvB assessment

PBT and vPvB assessment

| Chemical name | PBT and vPvB assessment | |
|------------------|---|--|
| Hexanedioic acid | The substance is not PBT / vPvB PBT assessment does | |

| | not apply |
|-------------|---------------------------------|
| Citric Acid | The substance is not PBT / vPvB |

12.6. Endocrine disrupting properties

Endocrine disrupting properties

12.7. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste from residues/unused products

Dispose of in accordance with local regulations. Dispose of waste in accordance with

environmental legislation.

Contaminated packaging Do not reuse empty containers.

SECTION 14. Transport information

| SECTION 14: Transport information | | | | | |
|-----------------------------------|----------------|--|--|--|--|
| | | | | | |
| IATA | | | | | |
| 14.1 UN number or ID number | Not regulated | | | | |
| 14.2 | | | | | |
| 14.3 Transport hazard class(es) | Not regulated | | | | |
| 14.4 Packing group | Not regulated | | | | |
| 14.5 Environmental hazards | Not applicable | | | | |
| 14.6 Special precautions for user | | | | | |
| Special Provisions | None | | | | |
| | | | | | |
| IMDG | | | | | |
| 14.1 UN number or ID number | Not regulated | | | | |
| 14.2 | | | | | |
| 14.3 Transport hazard class(es) | Not regulated | | | | |
| 14.4 Packing group | Not regulated | | | | |
| 14.5 Marine pollutant | Not applicable | | | | |

14.5 Marine pollutant Not applicable 14.6 Special precautions for user

None

Special Provisions 14.7 Maritime transport in bulk

according to IMO instruments

14.1 UN number or ID number Not regulated 14.2 14.3 Transport hazard class(es) Not regulated

14.4 Packing group Not regulated 14.5 Environmental hazards Not applicable

14.6 Special precautions for user **Special Provisions**

None

ADR

14.1 UN number or ID number Not regulated 14.2

Not regulated 14.3 Transport hazard class(es) 14.4 Packing group Not regulated Not applicable 14.5 Environmental hazards

14.6 Special precautions for user

Special Provisions None

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SECTION 15: Regulatory information

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

Water hazard class (WGK) slightly hazardous to water (WGK 1)

European Union

Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

Authorisations and/or restrictions on use:

This product does not contain substances subject to authorisation (Regulation (EC) No. 1907/2006 (REACH), Annex XIV) This product does not contain substances subject to restriction (Regulation (EC) No. 1907/2006 (REACH), Annex XVII)

Persistent Organic Pollutants

Not applicable

Ozone-depleting substances (ODS) regulation (EC) 1005/2009

Not applicable

Biocidal Products Regulation (EU) No 528/2012 (BPR)

| Chemical name | Biocidal Products Regulation (EU) No 528/2012 (BPR) |
|-----------------------|---|
| Citric Acid - 77-92-9 | Product-type 1: Human hygiene |

International Inventories

Complies **TSCA** Complies **DSL/NDSL** Complies **EINECS/ELINCS** Complies **ENCS IECSC** Complies Complies **KECL PICCS** Complies **AICS** Complies

Legend:

TSCA - United States Toxic Substances Control Act Section 8(b) Inventory

DSL/NDSL - Canadian Domestic Substances List/Non-Domestic Substances List

EINECS/ELINCS - European Inventory of Existing Chemical Substances/European List of Notified Chemical Substances

ENCS - Japan Existing and New Chemical Substances

IECSC - China Inventory of Existing Chemical Substances

KECL - Korean Existing and Evaluated Chemical Substances

PICCS - Philippines Inventory of Chemicals and Chemical Substances

AICS - Australian Inventory of Chemical Substances

15.2. Chemical safety assessment

Chemical Safety Report

SECTION 16: Other information

Key or legend to abbreviations and acronyms used in the safety data sheet

Full text of H-Statements referred to under section 3

H319 - Causes serious eye irritation H335 - May cause respiratory irritation

Legend

SVHC: Substances of Very High Concern for Authorisation:

Legend Section 8: Exposure controls/personal protection

TWA TWA (time-weighted average) STEL STEL (Short Term Exposure Limit)

Ceiling Maximum limit value * Skin designation

| Classification procedure | |
|---|--------------------|
| Classification according to Regulation (EC) No. 1272/2008 [CLP] | Method Used |
| Acute oral toxicity | Calculation method |
| Acute dermal toxicity | Calculation method |
| Acute inhalation toxicity - gas | Calculation method |
| Acute inhalation toxicity - Vapour | Calculation method |
| Acute inhalation toxicity - dust/mist | Calculation method |
| Skin corrosion/irritation | Calculation method |
| Serious eye damage/eye irritation | Calculation method |
| Respiratory sensitisation | Calculation method |
| Skin sensitisation | Calculation method |
| Mutagenicity | Calculation method |
| Carcinogenicity | Calculation method |
| Reproductive toxicity | Calculation method |
| STOT - single exposure | Calculation method |
| STOT - repeated exposure | Calculation method |
| Acute aquatic toxicity | Calculation method |
| Chronic aquatic toxicity | Calculation method |
| Aspiration hazard | Calculation method |

Key literature references and sources for data used to compile the SDS

Agency for Toxic Substances and Disease Registry (ATSDR)

U.S. Environmental Protection Agency ChemView Database

European Food Safety Authority (EFSA)

EPA (Environmental Protection Agency)

Acute Exposure Guideline Level(s) (AEGL(s))

U.S. Environmental Protection Agency Federal Insecticide, Fungicide, and Rodenticide Act

U.S. Environmental Protection Agency High Production Volume Chemicals

Food Research Journal

Hazardous Substance Database

International Uniform Chemical Information Database (IUCLID)

Japan GHS Classification

Australian National Industrial Chemicals Notification and Assessment Scheme (NICNAS)

NIOSH (National Institute for Occupational Safety and Health)

National Library of Medicine's ChemID Plus (NLM CIP)

National Library of Medicine's PubMed database (NLM PUBMED)

National Toxicology Program (NTP)

New Zealand's Chemical Classification and Information Database (CCID)

Organisation for Economic Co-operation and Development Environment, Health, and Safety Publications

Organisation for Economic Co-operation and Development High Production Volume Chemicals Programme

Organisation for Economic Co-operation and Development Screening Information Data Set

World Health Organization

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This material safety data sheet complies with the requirements of Regulation (EC) No. 1907/2006 Disclaimer

The information provided in this Safety Data Sheet is correct to the best of our knowledge, information and belief at the date of its publication. The information given is designed only as a guidance for safe handling, use, processing, storage, transportation, disposal and release 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 or in any process, unless specified in the text.

End of Safety Data Sheet