

Article No.: P12004 WUXAL Multimicro Fluid 708090 GB
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SECTION 1: Identification of the substance/mixture and of the company/undertaking

1.1. product identifiers

Article No. (manufacturer/supplier) P12004
Identification of the substance or mixture WUXAL Multimicro Fluid
Product code:

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

Relevant identified uses

Fertilizers

1.3. Details of the supplier of the safety data sheet

supplier (manufacturer/importer/downstream user/distributor)

AGLUKON Spezialdünger GmbH & Co. KG
Heerdter Landstraße 199 Telephone: +49 (0) 211 5064 0
40549 Düsseldorf Telefax: +49 (0) 211 5064 247
Germany

Dept. responsible for information:

E-mail (competent person) reach@aglukon.com

1.4. Emergency telephone number

GIZ Mainz, POISON CENTER Tel.: +49 (0) 6131 19240
Germany
Information in English and German

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

The mixture is classified as hazardous according to regulation (EC) No 1272/2008 [CLP].

Met. Corr. 1 / H290	Corrosive to metals	May be corrosive to metals.
Skin Irrit. 2 / H315	Skin corrosion/irritation	Causes skin irritation.
Eye Dam. 1 / H318	Serious eye damage/eye irritation	Causes serious eye damage.
Aquatic Chronic 2 / H411	Hazardous to the aquatic environment	Toxic to aquatic life with long lasting effects.

2.2. Label elements

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

Hazard pictograms



Danger

Hazard statements

H290 May be corrosive to metals.
H315 Causes skin irritation.
H318 Causes serious eye damage.
H411 Toxic to aquatic life with long lasting effects.

Precautionary statements

P273 Avoid release to the environment.
P280 Wear protective gloves/eye protection/face protection.
P302 + P352 IF ON SKIN: Wash with plenty of water/soap.
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/doctor.
P390 Absorb spillage to prevent material damage.

contains:

zinc sulphate monohydrate
iron (III) sulfate

Supplemental Hazard information (EU)

not applicable

2.3. Other hazards

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The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

SECTION 3: Composition / information on ingredients

3.2. Mixtures

Product description / chemical characterization

Description

Hazardous ingredients

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

EC No. CAS No. INDEX No.	REACH No. Chemical name classification // Remark	Wt %
231-793-3 7446-19-7 030-006-00-9	01-2119474684-27-XXXX zinc sulphate monohydrate Acute Tox. 4 H302 / Eye Dam. 1 H318 / Aquatic Acute 1 H400 / Aquatic Chronic 1 H410	3 < 5
233-072-9 15244-10-7	iron (III) sulfate Acute Tox. 4 H302 / Skin Irrit. 2 H315 / Eye Dam. 1 H318	5 < 8
232-089-9 10034-96-5 025-003-00-4	01-2119456624-35-XXXX manganese sulphate monohydrate Eye Dam. 1 H318 / STOT RE 2 H373 / Aquatic Chronic 2 H411	3 < 5
231-847-6 7758-98-7 029-004-00-0	01-2119520566-40-XXXX copper sulphate pentahydrate Acute Tox. 4 H302 / Eye Dam. 1 H318 / Aquatic Acute 1 H400 (M = 10) / Aquatic Chronic 1 H410 (M = 1)	2 < 2,5
201-069-1 5949-29-1	01-2119457026-42-XXXX citric acid monohydrate Eye Irrit. 2 H319	10 < 15
233-139-2 10043-35-3 005-007-00-2	01-2119486683-25-XXXX boric acid Repr. 1B H360FD // This substance has been listed as SVHC (substance of very high concern) in the Candidate List according to Article 59 of REACH.	1 < 2

Additional information

Full text of classification: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

In all cases of doubt, or when symptoms persist, seek medical advice.

In case of inhalation

Remove casualty to fresh air and keep warm and at rest. In case of respiratory tract irritation, consult a physician.

Following skin contact

Take off immediately all contaminated clothing. After contact with skin, wash immediately with plenty of water and soap.

After eye contact

Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Seek medical advice immediately.

After ingestion

Rinse mouth thoroughly with water. Seek medical advice immediately. Keep victim calm.

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

No known symptoms to date.

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

Treat symptomatically.

SECTION 5: Firefighting measures

5.1. Extinguishing media

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The product itself does not burn.

Suitable extinguishing media:

Water spray jet, Water mist, carbon dioxide, Powder

Extinguishing media which must not be used for safety reasons:

strong water jet

5.2. **Special hazards arising from the substance or mixture**

Hazardous combustion products: Sulphur oxides

5.3. **Advice for firefighters**

In case of fire: Wear self-contained breathing apparatus. Do not allow water used to extinguish fire to enter drains, ground or waterways.

SECTION 6: Accidental release measures

6.1. **Personal precautions, protective equipment and emergency procedures**

Provide adequate ventilation. Personal protection equipment: refer to section 8.

6.2. **Environmental precautions**

Do not allow to enter into surface water or drains.

6.3. **Methods and material for containment and cleaning up**

Isolate leaked material using non-flammable absorption agent (e.g. sand, earth, vermiculit, diatomaceous earth) and collect it for disposal in appropriate containers in accordance with the local regulations (see section 13).

6.4. **Reference to other sections**

Observe protective provisions (see section 7 and 8).

SECTION 7: Handling and storage

7.1. **Precautions for safe handling**

Advices on safe handling

Avoid contact with skin, eyes and clothes. When using do not eat, drink or smoke. Personal protection equipment: refer to section 8. Follow the legal protection and safety regulations.

Precautions against fire and explosion:

No special measures are necessary.

7.2. **Conditions for safe storage, including any incompatibilities**

Requirements for storage rooms and vessels

Protect from heat and direct sunlight. Keep container tightly closed. Always keep in containers that correspond to the material of the original container.

Hints on joint storage

Do not store together with: Food and feedingstuffs.

Further information on storage conditions

Take care of instructions on label. Store in a well-ventilated and dry room at temperatures between -5 °C and 40 °C. Store carefully closed containers upright to prevent any leaks.

7.3. **Specific end use(s)**

Observe technical data sheet. Observe instructions for use.

SECTION 8: Exposure controls/personal protection

8.1. **Control parameters**

Occupational exposure limit values

not applicable

8.2. **Exposure controls**

Technical measures and the application of suitable work processes have priority over personal protection equipment. See section 7. No additional measures necessary.

Occupational exposure controls

Respiratory protection

Usually no personal respirative protection necessary.

Hand protection

For prolonged or repeated handling the following glove material must be used: e.g. NBR (Nitrile rubber).

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Thickness of the glove material: No data available. Breakthrough time (maximum wearing time): No data available.
Observe the instructions and details for use, storage, maintenance and replacement provided by the protective glove manufacturer. Penetration time of glove material depending on intensity and duration of exposure to skin. Recommended glove articles: EN ISO 374.
Barrier creams can help protecting exposed skin areas. In no case should they be used after contact.

Eye protection

Wear eye glasses with side protection according to EN 166.

Protective measures

After contact clean skin thoroughly with water and soap or use appropriate cleanser.

Environmental exposure controls

Do not allow to enter into surface water or drains. See chapter 7. No additional measures necessary.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance:

Physical state:	Liquid
Colour:	green
Odour:	characteristic
Odour threshold:	not applicable
pH at 20 °C::	0,6
Melting point/freezing point:	not applicable
Initial boiling point and boiling range:	not determined
Flash point:	not applicable
Evaporation rate:	not applicable
Flammability (solid, gas):	
Burning time (s):	not applicable
Upper/lower flammability or explosive limits:	
Lower explosion limit:	not applicable
Upper explosion limit:	not applicable
Vapour pressure at 20 °C::	not applicable
Vapour density:	not applicable
Relative density:	
Density at 20 °C::	1,32 g/cm ³
Solubility(ies):	
Water solubility (g/L) at 20 °C::	very soluble
Partition coefficient: n-octanol/water:	see section 12
Auto-ignition temperature:	not applicable
Decomposition temperature:	not applicable
Viscosity at 20 °C::	not determined
Explosive properties:	not applicable
Oxidising properties:	not applicable

9.2. Other information

No information available.

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable when applying the recommended regulations for storage and handling. Further information on correct storage: refer to section 7.

10.2. Chemical stability

Stable when applying the recommended regulations for storage and handling. Further information on correct storage: refer to section 7.

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10.3. Possibility of hazardous reactions

No hazardous reaction when handled and stored according to provisions.

10.4. Conditions to avoid

Protect from heat and direct sunlight.

10.5. Incompatible materials

Alkali (lye)

10.6. Hazardous decomposition products

Does not decompose when used for intended uses. Hazardous decomposition byproducts may form with exposure to high temperatures: Sulphur oxides

SECTION 11: Toxicological information

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

No data on preparation itself available.

11.1. Information on toxicological effects

Acute toxicity

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oral, LD50, Rat: > 2000 mg/kg

zinc sulphate monohydrate

oral, LD50, Rat: 1710 mg/kg ; evaluation Harmful if swallowed.

copper sulphate pentahydrate

oral, LD50, Rat: 301 mg/kg ; evaluation Harmful if swallowed.

Method: OECD 401

eyes: evaluation Causes serious eye damage.

Calculation method.

Skin: evaluation Causes skin irritation.

Calculation method.

skin corrosion/irritation; Serious eye damage/eye irritation

Causes skin irritation.

Causes serious eye damage.

zinc sulphate monohydrate

eyes: evaluation Causes serious eye damage.

Method: OECD 405

iron (III) sulfate

eyes: evaluation Causes serious eye damage.

Skin: evaluation Causes skin irritation.

citric acid monohydrate

eyes: evaluation Causes serious eye irritation.

Respiratory or skin sensitisation

Toxicological data are not available.

Specific target organ toxicity

Toxicological data are not available.

Aspiration hazard

Toxicological data are not available.

Practical experience/human evidence

No information available.

Overall Assessment on CMR properties

EC No. CAS No.	Chemical name	Classification according to Regulation (EC) No 1272/2008 [CLP]
233-139-2 10043-35-3	boric acid	Repr. 1B

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Remark

There is no information available on the preparation itself .

SECTION 12: Ecological information

overall evaluation

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

There is no information available on the preparation itself .

12.1. Toxicity

zinc sulphate monohydrate

Daphnia toxicity, EC50, Daphnia magna: 0,56 mg/l (48 h)

Algae toxicity, ErC50, Scenedesmus quadricauda: 0,52 mg/l

manganese sulphate monohydrate

Fish toxicity, LC50, Pimephales promelas (fathead minnow): 30,6 mg/l (96 h)

Daphnia toxicity, EC50, Daphnia magna: 8,3 mg/l (48 h)

Algae toxicity, ErC50, Desmodesmus subspicatus.: 61 mg/l (72 h)

copper sulphate pentahydrate

Daphnia toxicity, EC50, Daphnia magna: 0,025 mg/l (48 h)

Long-term Ecotoxicity

Toxic to aquatic life with long lasting effects.

:

WUXAL Multimicro Fluid

Ecotoxicity: evaluation Toxic to aquatic life with long lasting effects.

Calculation method.

12.2. Persistence and degradability

No data available.

12.3. Bioaccumulative potential

No data available.

Bioconcentration factor (BCF)

No data available.

12.4. Mobility in soil

No data available.

12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.

12.6. Other adverse effects

No information available.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Appropriate disposal / Product Recommendation

Do not allow to enter into surface water or drains. This material and its container must be disposed of in a safe way. Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste.

List of proposed waste codes/waste designations in accordance with EWC

020108* Agrochemical waste containing hazardous substances

packaging

Recommendation

Non-contaminated packages may be recycled. Vessels not properly emptied are special waste.

SECTION 14: Transport information

14.1. UN number

UN 1760

14.2. UN proper shipping name

Land transport (ADR/RID):

Corrosive liquid, n.o.s.
(IRON(III) SULPHATE)

Safety Data Sheet
according to Regulation (EC) No. 1907/2006 (REACH)
according to Regulation (EU) 2015/830

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- Sea transport (IMDG): CORROSIVE LIQUID, N.O.S.
(IRON(III) SULPHATE)
Air transport (ICAO-TI / IATA-DGR): Corrosive liquid, n.o.s.
(IRON(III) SULPHATE)
- 14.3. **Transport hazard class(es)** 8
- 14.4. **Packing group** III
- 14.5. **Environmental hazards**
Land transport (ADR/RID) UMWELTGEFÄHRDEND
Marine pollutant p / COPPER SULPHATE
- 14.6. **Special precautions for user**
Transport always in closed, upright and safe containers. Make sure that persons transporting the product know what to do in case of an accident or leakage.
Advices on safe handling: see parts 6 - 8
- Further information**
- Land transport (ADR/RID)**
tunnel restriction code E
- Sea transport (IMDG)**
EmS-No. F-A, S-B
Segregation group IMDG Code segregation group 7 - heavy metals and their salts (including their organometallic compounds)
in packages <= 5 litres not restricted 2.10.2.7
- Air transport (ICAO-TI / IATA-DGR)**
- 14.7. **Transport in bulk according to Annex II of Marpol and the IBC Code**
Not applicable.

SECTION 15: Regulatory information

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

EU legislation

REACH

SVHC/candidate list: boric acid List of substances of very high concern (SVHC) from which the substances to be included in Annex XIV of the REACH Regulation (list of substances subject to authorisation) are selected. The candidate list is established in accordance with Article 59 of the REACH Regulation.

Directive 2010/75/EU on industrial emissions

VOC-value (in g/L): 0,000

National regulations

Restrictions of occupation

Observe employment restrictions under the Maternity Protection Directive (92/85/EEC) for expectant or nursing mothers.
Observe restrictions to employment for juvenils according to the 'juvenile work protection guideline' (94/33/EC).

15.2. **Chemical Safety Assessment**

For the following substances of this preparation a chemical safety assessment has been carried out:

EC No. CAS No.	Chemical name	REACH No.
231-847-6 7758-98-7	copper sulphate pentahydrate	01-2119520566-40-XXXX
233-139-2 10043-35-3	boric acid	01-2119486683-25-XXXX

SECTION 16: Other information

Full text of classification in section 3:

Acute Tox. 4 / H302
Eye Dam. 1 / H318

Acute toxicity (oral)
Serious eye damage/eye irritation

Harmful if swallowed.
Causes serious eye damage.

Safety Data Sheet
according to Regulation (EC) No. 1907/2006 (REACH)
according to Regulation (EU) 2015/830

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Aquatic Acute 1 / H400	Hazardous to the aquatic environment	Very toxic to aquatic organisms.
Aquatic Chronic 1 / H410	Hazardous to the aquatic environment	Very toxic to aquatic life with long lasting effects.
Skin Irrit. 2 / H315	Skin corrosion/irritation	Causes skin irritation.
STOT RE 2 / H373	STOT-repeated exposure	May cause damage to organs (or state all organs affected, if known) through prolonged or repeated exposure (state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard).
Aquatic Chronic 2 / H411	Hazardous to the aquatic environment	Toxic to aquatic life with long lasting effects.
Eye Irrit. 2 / H319	Serious eye damage/eye irritation	Causes serious eye irritation.
Repr. 1B / H360FD	Reproductive toxicity	May damage fertility. May damage the unborn child.

Further information

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

The information supplied on this safety data sheet complies with our current level of knowledge as well as with national and EU regulations. Without written approval, the product must not be used for purposes different from those mentioned in chapter 1. It is always the user's duty to take any necessary measures for meeting the requirements laid down by local rules and regulations. The details in this safety data sheet describe the safety requirements of our product and are not to be regarded as guaranteed attributes of the product.