

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

1.1. Product identifier

Product name : QUATRO COMBI

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

1.2.1. Relevant identified uses

Use of the substance/mixture : Vegetable based micronutrient

1.2.2. Uses advised against

Restrictions on use : No data available

1.3. Details of the supplier of the safety data sheet

AgroQuatro Organik Tarım Sanayi Ticaret A.Ş.
Egemenlik Mh. 6106/15 Sk. No: 13 Bornova / İzmir
TURKEY
T +90 232 273 60 60 - F +90 232 273 60 60
info@agroquatro.com - www.agroquatro.com

1.4. Emergency telephone number

Emergency number : +90 232 273 60 60

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

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

Acute toxicity (oral), Category 4	H302
Serious eye damage/eye irritation, Category 1	H318
Reproductive toxicity, Category 1B	H360
Specific target organ toxicity — Repeated exposure, Category 2	H373
Hazardous to the aquatic environment — Acute Hazard, Category 1	H400
Hazardous to the aquatic environment — Chronic Hazard, Category 1	H410
Full text of H statements : see section 16	

Adverse physicochemical, human health and environmental effects

To our knowledge, this product does not present any particular risk, provided it is handled in accordance with good occupational hygiene and safety practice. May damage fertility or the unborn child. May cause damage to organs through prolonged or repeated exposure. Harmful if swallowed. Causes serious eye damage. Very toxic to aquatic life with long lasting effects.

2.2. Label elements

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

Hazard pictograms (CLP) :



Signal word (CLP) :

Danger

Contains :

Boric acid; Copper sulphate pentahydrate; Zinc sulphate monohydrate; Manganese sulphate; Iron sulphate heptahydrate

Hazard statements (CLP) :

H302 - Harmful if swallowed.
H318 - Causes serious eye damage.
H360 - May damage fertility or the unborn child.
H373 - May cause damage to organs through prolonged or repeated exposure.
H410 - Very toxic to aquatic life with long lasting effects.

QUATRO COMBI

Safety Data Sheet

according to Regulation (EU) 2015/830

Precautionary statements (CLP)

: P201 - Obtain special instructions before use.
P202 - Do not handle until all safety precautions have been read and understood.
P260 - Do not breathe dust/fume/gas/mist/vapours/spray.
P264 - Wash hands, forearms and face thoroughly after handling.
P270 - Do not eat, drink or smoke when using this product.
P273 - Avoid release to the environment.
P280 - Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
P301+P312 - IF SWALLOWED: Call a POISON CENTRE or doctor if you feel unwell.
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.
P314 - Get medical advice/attention if you feel unwell.
P330 - Rinse mouth.
P391 - Collect spillage.
P405 - Store locked up.
P501 - Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.

2.3. Other hazards

No additional information available

SECTION 3: Composition/information on ingredients

3.1. Substances

Not applicable

3.2. Mixtures

Name	Product identifier	%	Classification according to Regulation (EC) No. 1272/2008 [CLP]
Zinc sulphate monohydrate	(CAS-No.) 7733-02-0 (EC-No.) 231-793-3 (EC Index-No.) 030-006-00-9	30 – 40	Acute Tox. 4 (Oral), H302 Eye Dam. 1, H318 Aquatic Acute 1, H400 Aquatic Chronic 1, H410
Manganese sulphate	(CAS-No.) 7785-87-7 (EC-No.) 232-089-9 (EC Index-No.) 025-003-00-4	20 – 30	STOT RE 2, H373 Aquatic Chronic 2, H411
Iron sulphate heptahydrate	(CAS-No.) 7782-63-0 (EC-No.) 231-753-5 (EC Index-No.) 026-003-01-4	20 – 25	Acute Tox. 4 (Oral), H302 Eye Irrit. 2, H319 Skin Irrit. 2, H315
Boric acid	(CAS-No.) 10043-35-3 (EC-No.) 233-139-2 (EC Index-No.) 005-007-00-2	5 – 10	Repr. 1B, H360FD
Copper sulphate pentahydrate	(CAS-No.) 7758-99-8 (EC-No.) 231-847-6 (EC Index-No.) 029-023-00-4 (REACH-no) 01-2119520566-40	5 – 10	Acute Tox. 4 (Oral), H302 Eye Dam. 1, H318 Aquatic Acute 1, H400 (M=10) Aquatic Chronic 1, H410 (M=10)

Specific concentration limits:

Name	Product identifier	Specific concentration limits
Iron sulphate heptahydrate	(CAS-No.) 7782-63-0 (EC-No.) 231-753-5 (EC Index-No.) 026-003-01-4	(25 ≤C ≤ 100) Skin Irrit. 2, H315

QUATRO COMBI

Safety Data Sheet

according to Regulation (EU) 2015/830

Boric acid	(CAS-No.) 10043-35-3 (EC-No.) 233-139-2 (EC Index-No.) 005-007-00-2	(5.5 ≤C < 100) Repr. 1B, H360FD
------------	---	----------------------------------

Full text of H-statements: see section 16

SECTION 4: First aid measures

4.1. Description of first aid measures

First-aid measures general	: IF exposed or concerned: Get medical advice/attention. Call a poison center or a doctor if you feel unwell.
First-aid measures after inhalation	: Remove person to fresh air and keep comfortable for breathing. If experiencing respiratory symptoms: Call a poison center or a doctor.
First-aid measures after skin contact	: Wash skin with plenty of water. If skin irritation occurs: Get medical advice/attention.
First-aid measures after eye contact	: Remove contact lenses, if present and easy to do. Continue rinsing. Rinse cautiously with water for several minutes. Call a physician immediately.
First-aid measures after ingestion	: Rinse mouth. Do not induce vomiting. Call a poison center or a doctor if you feel unwell.

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

Symptoms/effects after eye contact	: Serious damage to eyes.
------------------------------------	---------------------------

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	: Water spray. Dry powder. Foam. Carbon dioxide.
Unsuitable extinguishing media	: None known.

5.2. Special hazards arising from the substance or mixture

Hazardous decomposition products in case of fire;	: Toxic fumes may be released.
---	--------------------------------

5.3. Advice for firefighters

Protection during firefighting	: Do not attempt to take action without suitable protective equipment. Self-contained breathing apparatus. Complete protective clothing.
--------------------------------	--

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

6.1.1. For non-emergency personnel

Protective equipment	: Wear recommended personal protective equipment.
Emergency procedures	: Ventilate spillage area. Avoid all unnecessary exposure. Only qualified personnel equipped with suitable protective equipment may intervene. Do not breathe dust.

6.1.2. For emergency responders

Protective equipment	: Do not attempt to take action without suitable protective equipment. For further information refer to section 8: "Exposure controls/personal protection".
Emergency procedures	: Avoid all unnecessary exposure. Evacuate unnecessary personnel.

6.2. Environmental precautions

Avoid release to the environment. Notify authorities if product enters sewers or public waters.

6.3. Methods and material for containment and cleaning up

For containment	: Collect spillage.
-----------------	---------------------

QUATRO COMBI

Safety Data Sheet

according to Regulation (EU) 2015/830

Methods for cleaning up	: Mechanically recover the product. Take up liquid spill into absorbent material. Collect in closed containers for disposal. Notify authorities if product enters sewers or public waters.
Other information	: Dispose of materials or solid residues at an authorized site.

6.4. Reference to other sections

Refer to protective measures listed in Sections 7 and 8. For further information refer to section 13.

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Precautions for safe handling	: Ensure good ventilation of the work station. Wear personal protective equipment. Avoid all unnecessary exposure. Obtain special instructions before use. Do not handle until all safety precautions have been read and understood. Do not breathe dust. Avoid contact with skin and eyes.
Hygiene measures	: Do not eat, drink or smoke when using this product. Always wash hands after handling the product. Separate working clothes from town clothes. Launder separately.

7.2. Conditions for safe storage, including any incompatibilities

Storage conditions	: Store locked up. Keep container tightly closed and dry. Keep in a cool, well-ventilated place away from incompatible materials.
--------------------	---

7.3. Specific end use(s)

No additional information available

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Copper sulphate pentahydrate (7758-99-8)

EU - Occupational Exposure Limits

Local name	Copper(II) sulfate pentahydrate
IOELV TWA (mg/m ³)	0.01 mg/m ³ (respirable fraction)
Notes	(Year of adoption 2014)
Regulatory reference	SCOEL Recommendations

Manganese sulphate (7785-87-7)

EU - Occupational Exposure Limits

Local name	Manganese (II) sulphate
IOELV TWA (mg/m ³)	0.2 mg/m ³ (inhalable fraction) 0.05 mg/m ³ (respirable fraction)
Notes	(Year of adoption 2011)
Regulatory reference	SCOEL Recommendations

Boric acid (10043-35-3)

DNEL/DMEL (Workers)

Long-term - systemic effects, dermal	392 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	8.3 mg/m ³

DNEL/DMEL (General population)

Acute - systemic effects, oral	0.98 mg/kg bodyweight/day
Long-term - systemic effects, oral	0.98 mg/kg bodyweight/day

QUATRO COMBI

Safety Data Sheet

according to Regulation (EU) 2015/830

Long-term - systemic effects, inhalation	4.15 mg/m ³
Long-term - systemic effects, dermal	196 mg/kg bodyweight/day
PNEC (Water)	
PNEC aqua (freshwater)	2.9 mg/l
PNEC aqua (marine water)	2.9 mg/l
PNEC aqua (intermittent, freshwater)	13.7 mg/l
PNEC (Soil)	
PNEC soil	5.7 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	10 mg/l

Manganese sulphate (7785-87-7)

DNEL/DMEL (Workers)	
Long-term - systemic effects, dermal	0.00414 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	0.2 mg/m ³
DNEL/DMEL (General population)	
Long-term - systemic effects, inhalation	0.043 mg/m ³
Long-term - systemic effects, dermal	0.0021 mg/kg bodyweight/day
PNEC (Water)	
PNEC aqua (freshwater)	0.0128 mg/l
PNEC aqua (marine water)	0.0004 mg/l
PNEC aqua (intermittent, freshwater)	0.03 mg/l
PNEC (Sediment)	
PNEC sediment (freshwater)	0.0114 mg/kg dwt
PNEC sediment (marine water)	0.00114 mg/kg dwt
PNEC (Soil)	
PNEC soil	25.1 mg/kg dwt
PNEC (STP)	
PNEC sewage treatment plant	56 mg/l

Zinc sulphate monohydrate (7733-02-0)

DNEL/DMEL (Workers)	
Long-term - systemic effects, dermal	8.3 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	1 mg/m ³
DNEL/DMEL (General population)	
Long-term - systemic effects, oral	0.83 mg/kg bodyweight/day
Long-term - systemic effects, inhalation	1.3 mg/m ³
Long-term - systemic effects, dermal	8.3 mg/kg bodyweight/day
PNEC (Water)	
PNEC aqua (freshwater)	20.6 µg/l
PNEC aqua (marine water)	6.1 µg/l

QUATRO COMBI

Safety Data Sheet

according to Regulation (EU) 2015/830

PNEC (Sediment)

PNEC sediment (freshwater)	117.8 mg/kg dwt
----------------------------	-----------------

PNEC sediment (marine water)	56.5 mg/kg dwt
------------------------------	----------------

PNEC (Soil)

PNEC soil	35.6 mg/kg dwt
-----------	----------------

PNEC (STP)

PNEC sewage treatment plant	52 µg/l
-----------------------------	---------

8.2. Exposure controls

Appropriate engineering controls:

Ensure good ventilation of the work station. Emergency eye wash fountains and safety showers should be available in the immediate vicinity of any potential exposure.

Hand protection:

Protective gloves. Standard EN 374 - Protective gloves against chemicals. Choosing the proper glove is a decision that depends not only on the type of material, but also on other quality features, which differ for each manufacturer. Gloves must be replaced after each use and whenever signs of wear or perforation appear

Eye protection:

Safety glasses with side shields. Standard EN 166 - Personal eye-protection.

Skin and body protection:

Wear suitable protective clothing. Standard EN 14605 - Protective clothing against liquid chemicals.

Respiratory protection:

[In case of inadequate ventilation] Wear respiratory protection. Standard EN149 - Filtering Halfmasks to protect against particles

Personal protective equipment symbol(s):



Environmental exposure controls:

Avoid release to the environment.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state	: Solid
Appearance	: Powder.
Colour	: White.
Odour	: Characteristics.
Odour threshold	: No data available
pH	: 2.25
Relative evaporation rate (butylacetate=1)	: No data available
Melting point	: Not applicable
Freezing point	: Not applicable
Boiling point	: No data available
Flash point	: Not applicable
Auto-ignition temperature	: Not applicable
Decomposition temperature	: No data available

QUATTRO COMBI

Safety Data Sheet

according to Regulation (EU) 2015/830

Flammability (solid, gas)	: Not applicable
Vapour pressure	: No data available
Relative vapour density at 20 °C	: No data available
Relative density	: No data available
Solubility	: Soluble in water.
Partition coefficient n-octanol/water (Log Pow)	: No data available
Viscosity, kinematic	: No data available
Viscosity, dynamic	: No data available
Explosive properties	: No data available
Oxidising properties	: No data available
Explosive limits	: Not applicable

9.2. Other information

No additional information available

SECTION 10: Stability and reactivity

10.1. Reactivity

The product is non-reactive under normal conditions of use, storage and transport.

10.2. Chemical stability

Stable under normal conditions.

10.3. Possibility of hazardous reactions

No dangerous reactions known under normal conditions of use.

10.4. Conditions to avoid

None under recommended storage and handling conditions (see section 7).

10.5. Incompatible materials

No additional information available

10.6. Hazardous decomposition products

Under normal conditions of storage and use, hazardous decomposition products should not be produced.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Acute toxicity (oral)	: Harmful if swallowed.
Acute toxicity (dermal)	: Not classified
Acute toxicity (inhalation)	: Not classified

Boric acid (10043-35-3)

LD50 oral rat	> 2600 mg/kg bodyweight Animal: rat, Animal sex: male, Guideline: OECD Guideline 401 (Acute Oral Toxicity), Guideline: EU Method B.1 (Acute Toxicity (Oral))
LD50 dermal rabbit	> 2000 mg/kg bodyweight Animal: rabbit, Guideline: other:FIFRA (40 CFR 163)
LC50 inhalation rat	> 2.12 mg/l air Animal: rat, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity), Guideline: other:USEPA FIFRA 40 CFR Part 160

Copper sulphate pentahydrate (7758-99-8)

LD50 oral rat	482 mg/kg bodyweight (CuSO ₄ .5H ₂ O, OECD 401, Lheritier, 1994., Pharmakon Europe, Report No. 44193.)
LD50 dermal rat	> 2000 mg/kg bodyweight (CuSO ₄ .5H ₂ O, OECD 402, Lheritier, 1993., Pharmakon Europe, Report No. 44293.)

QUATRO COMBI

Safety Data Sheet

according to Regulation (EU) 2015/830

Manganese sulphate (7785-87-7)

LC50 inhalation rat	> 4.45 mg/l air Animal: rat, Guideline: OECD Guideline 403 (Acute Inhalation Toxicity), Guideline: EU Method B.2 (Acute Toxicity (Inhalation))
---------------------	--

Zinc sulphate monohydrate (7733-02-0)

LD50 oral	≈ 926 mg/kg bodyweight Animal: mouse, Animal sex: male, Guideline: OECD Guideline 401 (Acute Oral Toxicity), 95% CL: 636 - 1350
LD50 dermal rabbit	> 2000 mg/kg bodyweight Animal: rabbit, Guideline: OECD Guideline 402 (Acute Dermal Toxicity)

Skin corrosion/irritation	: Not classified
Serious eye damage/irritation	: Causes serious eye damage.
Respiratory or skin sensitisation	: Not classified
Germ cell mutagenicity	: Not classified
Carcinogenicity	: Not classified

Manganese sulphate (7785-87-7)

NOAEL (chronic, oral, animal/male, 2 years)	615 mg/kg bodyweight Animal: rat, Animal sex: male, Remarks on results: other:Effect type: carcinogenicity (migrated information)
NOAEL (chronic, oral, animal/female, 2 years)	715 mg/kg bodyweight Animal: rat, Animal sex: female, Remarks on results: other:Effect type: carcinogenicity (migrated information)

Reproductive toxicity	: May damage fertility or the unborn child.
STOT-single exposure	: Not classified
STOT-repeated exposure	: May cause damage to organs through prolonged or repeated exposure.
Aspiration hazard	: Not classified

SECTION 12: Ecological information

12.1. Toxicity

Hazardous to the aquatic environment, short-term (acute)	: Very toxic to aquatic life.
Hazardous to the aquatic environment, long-term (chronic)	: Very toxic to aquatic life with long lasting effects.

Boric acid (10043-35-3)

LC50 fish	79.7 mg/l Test organisms (species): Pimephales promelas
LC50 fish	74 mg/l Test organisms (species): Limanda limanda
EC50 daphnia	760 mg/l (Daphnia magna)
EC50 algae	54 mg/l Test organisms (species): Phaeodactylum tricornutum
NOEC chronic fish	6.4 mg/l Test organisms (species): Danio rerio (previous name: Brachydanio rerio) Duration: '34 d'

Manganese sulphate (7785-87-7)

EC50 algae	61 mg/l Test organisms (species): Desmodesmus subspicatus (previous name: Scenedesmus subspicatus)
------------	--

12.2. Persistence and degradability

No additional information available

QUATRO COMBI

Safety Data Sheet

according to Regulation (EU) 2015/830

12.3. Bioaccumulative potential

Boric acid (10043-35-3)

Bioaccumulative potential	Not expected to be bioaccumulative.
---------------------------	-------------------------------------

Copper sulphate pentahydrate (7758-99-8)

Partition coefficient n-octanol/water (Log Pow)	Not relevant
---	--------------

12.4. Mobility in soil

Boric acid (10043-35-3)

Ecology - soil	Spillages may cause the contamination of ground water by penetrating to the soil.
----------------	---

Manganese sulphate (7785-87-7)

Ecology - soil	Soluble in water. Spillages may cause the contamination of ground water by penetrating to the soil.
----------------	---

12.5. Results of PBT and vPvB assessment

Component

Boric acid (10043-35-3)	This substance/mixture does not meet the PBT criteria of REACH regulation, annex XIII This substance/mixture does not meet the vPvB criteria of REACH regulation, annex XIII
-------------------------	---

12.6. Other adverse effects

No additional information available

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Waste treatment methods	: Dispose of contents/container in accordance with licensed collector's sorting instructions.
Product/Packaging disposal recommendations	: Dispose of contents/container to hazardous or special waste collection point, in accordance with local, regional, national and/or international regulation.
Additional information	: Do not re-use empty containers.
European List of Waste (LoW) code	: According to the European Waste Catalogue, waste codes are not product specific, but application specific. Waste codes should be assigned by the user.

SECTION 14: Transport information

In accordance with ADR / RID / IMDG / IATA / ADN

ADR	IMDG	IATA	ADN	RID
14.1. UN number				
UN 3077	UN 3077	UN 3077	UN 3077	UN 3077
14.2. UN proper shipping name				
ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Zinc sulphate monohydrate ; Copper sulphate pentahydrate)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Zinc sulphate monohydrate ; Copper sulphate pentahydrate)	Environmentally hazardous substance, solid, n.o.s. (Zinc sulphate monohydrate ; Copper sulphate pentahydrate)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Zinc sulphate monohydrate ; Copper sulphate pentahydrate)	ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Zinc sulphate monohydrate ; Copper sulphate pentahydrate)

QUATRO COMBI

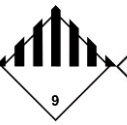
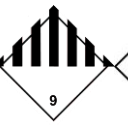
Safety Data Sheet

according to Regulation (EU) 2015/830

Transport document description

UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Zinc sulphate monohydrate ; Copper sulphate pentahydrate), 9, III, (-)	UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Zinc sulphate monohydrate ; Copper sulphate pentahydrate), 9, III, MARINE POLLUTANT	UN 3077 Environmentally hazardous substance, solid, n.o.s. (Zinc sulphate monohydrate ; Copper sulphate pentahydrate), 9, III	UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Zinc sulphate monohydrate ; Copper sulphate pentahydrate), 9, III	UN 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (Zinc sulphate monohydrate ; Copper sulphate pentahydrate), 9, III
---	--	--	--	--

14.3. Transport hazard class(es)

9	9	9	9	9
				

14.4. Packing group

III	III	III	III	III
-----	-----	-----	-----	-----

14.5. Environmental hazards

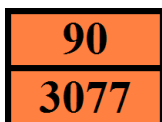
Dangerous for the environment : Yes	Dangerous for the environment : Yes Marine pollutant : Yes	Dangerous for the environment : Yes	Dangerous for the environment : Yes	Dangerous for the environment : Yes
--	--	--	--	--

No supplementary information available

14.6. Special precautions for user

Overland transport

Classification code (ADR)	: M7
Special provisions (ADR)	: 274, 335, 375, 601
Limited quantities (ADR)	: 5kg
Excepted quantities (ADR)	: E1
Packing instructions (ADR)	: P002, IBC08, LP02, R001
Special packing provisions (ADR)	: PP12, B3
Mixed packing provisions (ADR)	: MP10
Portable tank and bulk container instructions (ADR)	: T1, BK1, BK2, BK3
Portable tank and bulk container special provisions (ADR)	: TP33
Tank code (ADR)	: SGAV, LGBV
Vehicle for tank carriage	: AT
Transport category (ADR)	: 3
Special provisions for carriage - Packages (ADR)	: V13
Special provisions for carriage - Bulk (ADR)	: VC1, VC2
Special provisions for carriage - Loading, unloading and handling (ADR)	: CV13
Hazard identification number (Kemler No.)	: 90
Orange plates	:



Tunnel restriction code (ADR)	: -
EAC code	: 2Z

Transport by sea

Special provisions (IMDG)	: 274, 335, 966, 967, 969
Limited quantities (IMDG)	: 5 kg
Excepted quantities (IMDG)	: E1
Packing instructions (IMDG)	: LP02, P002
Special packing provisions (IMDG)	: PP12
IBC packing instructions (IMDG)	: IBC08

QUATRO COMBI

Safety Data Sheet

according to Regulation (EU) 2015/830

IBC special provisions (IMDG)	: B3
Tank instructions (IMDG)	: BK1, BK2, BK3, T1
Tank special provisions (IMDG)	: TP33
EmS-No. (Fire)	: F-A
EmS-No. (Spillage)	: S-F
Stowage category (IMDG)	: A
Stowage and handling (IMDG)	: SW23

Air transport

PCA Excepted quantities (IATA)	: E1
PCA Limited quantities (IATA)	: Y956
PCA limited quantity max net quantity (IATA)	: 30kgG
PCA packing instructions (IATA)	: 956
PCA max net quantity (IATA)	: 400kg
CAO packing instructions (IATA)	: 956
CAO max net quantity (IATA)	: 400kg
Special provisions (IATA)	: A97, A158, A179, A197
ERG code (IATA)	: 9L

Inland waterway transport

Classification code (ADN)	: M7
Special provisions (ADN)	: 274, 335, 375, 601
Limited quantities (ADN)	: 5 kg
Excepted quantities (ADN)	: E1
Equipment required (ADN)	: PP, A
Number of blue cones/lights (ADN)	: 0
Additional requirements/Remarks (ADN)	: * Only in the molten state. ** For carriage in bulk see also 7.1.4.1. *** Only in the case of transport in bulk.

Rail transport

Classification code (RID)	: M7
Special provisions (RID)	: 274, 335, 375, 601
Limited quantities (RID)	: 5kg
Excepted quantities (RID)	: E1
Packing instructions (RID)	: P002, IBC08, LP02, R001
Special packing provisions (RID)	: PP12, B3
Mixed packing provisions (RID)	: MP10
Portable tank and bulk container instructions (RID)	: T1, BK1, BK2, BK3
Portable tank and bulk container special provisions (RID)	: TP33
Tank codes for RID tanks (RID)	: SGAV, LGBV
Transport category (RID)	: 3
Special provisions for carriage – Packages (RID)	: W13
Special provisions for carriage – Bulk (RID)	: VC1, VC2
Special provisions for carriage - Loading, unloading and handling (RID)	: CW13, CW31
Colis express (express parcels) (RID)	: CE11
Hazard identification number (RID)	: 90

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

15.1.1. EU-Regulations

Contains no REACH substances with Annex XVII restrictions

Contains a substance on the REACH candidate list in concentration $\geq 0.1\%$ or with a lower specific limit: Boric acid (EC 233-139-2, CAS 10043-35-3)

Contains no REACH Annex XIV substances

Contains no substance subject to Regulation (EU) No 649/2012 of the European Parliament and of the Council of 4 July 2012 concerning the export and import of hazardous chemicals.

Contains no substance subject to Regulation (EU) No 2019/1021 of the European Parliament and of the Council of 20 June 2019 on persistent organic pollutants

QUATRO COMBI

Safety Data Sheet

according to Regulation (EU) 2015/830

15.1.2. National regulations

Germany

- Employment restrictions : Observe restrictions according Act on the Protection of Working Mothers (MuSchG)
Observe restrictions according Act on the Protection of Young People in Employment (JArbSchG)
- Water hazard class (WGK) : WGK 3, Highly hazardous to water (Classification according to AwSV, Annex 1)
- Hazardous Incident Ordinance (12. BImSchV) : Is not subject of the Hazardous Incident Ordinance (12. BImSchV)

Netherlands

- SZW-lijst van kankerverwekkende stoffen : Manganese sulphate is listed
- SZW-lijst van mutagene stoffen : Manganese sulphate is listed
- NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Borstvoeding : None of the components are listed
- NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Vruchtbaarheid : Boric acid is listed
- NIET-limitatieve lijst van voor de voortplanting giftige stoffen – Ontwikkeling : Boric acid is listed

Denmark

- Danish National Regulations : Young people below the age of 18 years are not allowed to use the product
Pregnant/breastfeeding women working with the product must not be in direct contact with the product

15.2. Chemical safety assessment

No chemical safety assessment has been carried out

SECTION 16: Other information

Abbreviations and acronyms:

ADN	European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
ADR	European Agreement concerning the International Carriage of Dangerous Goods by Road
ATE	Acute Toxicity Estimate
BLV	Biological limit value
CAS-No.	Chemical Abstract Service number
CLP	Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008
DMEL	Derived Minimal Effect level
DNEL	Derived-No Effect Level
EC50	Median effective concentration
EC-No.	European Community number
EN	European Standard
IATA	International Air Transport Association
IMDG	International Maritime Dangerous Goods
LC50	Median lethal concentration
LD50	Median lethal dose
LOAEL	Lowest Observed Adverse Effect Level
NOAEC	No-Observed Adverse Effect Concentration
NOAEL	No-Observed Adverse Effect Level
NOEC	No-Observed Effect Concentration
OEL	Occupational Exposure Limit
PBT	Persistent Bioaccumulative Toxic

QUATRO COMBI

Safety Data Sheet

according to Regulation (EU) 2015/830

PNEC	Predicted No-Effect Concentration
REACH	Registration, Evaluation, Authorisation and Restriction of Chemicals Regulation (EC) No 1907/2006
RID	Regulations concerning the International Carriage of Dangerous Goods by Rail
SDS	Safety Data Sheet
vPvB	Very Persistent and Very Bioaccumulative
WGK	Water Hazard Class

Full text of H- and EUH-statements:

Acute Tox. 4 (Oral)	Acute toxicity (oral), Category 4
Aquatic Acute 1	Hazardous to the aquatic environment — Acute Hazard, Category 1
Aquatic Chronic 1	Hazardous to the aquatic environment — Chronic Hazard, Category 1
Aquatic Chronic 2	Hazardous to the aquatic environment — Chronic Hazard, Category 2
Eye Dam. 1	Serious eye damage/eye irritation, Category 1
Eye Irrit. 2	Serious eye damage/eye irritation, Category 2
Repr. 1B	Reproductive toxicity, Category 1B
Skin Irrit. 2	Skin corrosion/irritation, Category 2
STOT RE 2	Specific target organ toxicity — Repeated exposure, Category 2
H302	Harmful if swallowed.
H315	Causes skin irritation.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H360	May damage fertility or the unborn child.
H360FD	May damage fertility. May damage the unborn child.
H373	May cause damage to organs through prolonged or repeated exposure.
H400	Very toxic to aquatic life.
H410	Very toxic to aquatic life with long lasting effects.
H411	Toxic to aquatic life with long lasting effects.

Classification and procedure used to derive the classification for mixtures according to Regulation (EC) 1272/2008 [CLP]:

Acute Tox. 4 (Oral)	H302	Calculation method
Eye Dam. 1	H318	Calculation method
Repr. 1B	H360	Calculation method
STOT RE 2	H373	Calculation method
Aquatic Acute 1	H400	Calculation method
Aquatic Chronic 1	H410	Calculation method

DISCLAIMER OF LIABILITY The information in this SDS was obtained from sources which we believe are reliable. However, the information is provided without any warranty, express or implied, regarding its correctness. The conditions or methods of handling, storage, use or disposal of the product are beyond our control and may be beyond our knowledge. For this and other reasons, we do not assume responsibility and expressly disclaim liability for loss, damage or expense arising out of or in any way connected with the handling, storage, use or disposal of the product. This SDS was prepared and is to be used only for this product. If the product is used as a component in another product, this SDS information may not be applicable