according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



#### LM VERSION 1.2

Version Revision Date: SDS Number: Date of last issue: -

1.0 29.02.2024 50002421 Date of first issue: 29.02.2024

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

1.1 Product identifier

Product name LM VERSION 1.2

Other means of identification

Product code 50002421

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

Use of the Sub- : Fertilizers

stance/Mixture

**Recommended restrictions**: Use as recommended by the label.

**on use** For professional users only.

1.3 Details of the supplier of the safety data sheet

Supplier Address Cheminova Deutschland GmbH & Co. KG

Stader Elbstrasse 26

21683 Stade Germany

Telephone: +49 (0) 4141 9204 0 Telefax: +45 (0) 4141 9204 206

E-mail address: datenblatt@fmc.com, SDS-Info@fmc.com.

1.4 Emergency telephone number

For leak, fire, spill or accident emergencies, call: Germany: +49-69643508409 (CHEMTREC)

0800-181-7059 (CHEMTREC)

Medical emergency:

Germany: +49 (0) 551 19240

#### **SECTION 2: Hazards identification**

#### 2.1 Classification of the substance or mixture

#### Classification (REGULATION (EC) No 1272/2008)

Eye irritation, Category 2 H319: Causes serious eye irritation.

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



#### LM VERSION 1.2

Version Revision Date: SDS Number: Date of last issue: -

1.0 29.02.2024 50002421 Date of first issue: 29.02.2024

Reproductive toxicity, Category 1B H360FD: May damage fertility. May damage the

unborn child.

#### 2.2 Label elements

Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms



**!** 

Signal word : Danger

Hazard statements : H319 Causes serious eye irritation.

H360FD May damage fertility. May damage the unborn

child.

Precautionary statements : Prevention:

P201 Obtain special instructions before use.

P280 Wear protective gloves/ protective clothing/ eye protec-

tion/ face protection.

Response:

P305 + P351 + P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and

easy to do. Continue rinsing.

P308 + P313 IF exposed or concerned: Get medical advice/

attention.

P337 + P313 If eye irritation persists: Get medical advice/

attention.

Disposal:

P501 Dispose of contents/container as hazardous waste in

accordance with local regulations.

Hazardous components which must be listed on the label:

boric acid

**Additional Labelling** 

EUH401 To avoid risks to human health and the environment, comply with the instruc-

tions for use.

Restricted to professional users.

2.3 Other hazards

This substance/mixture contains no components considered to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of 0.1% or higher.

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



#### LM VERSION 1.2

Version Revision Date: SDS Number: Date of last issue: -

1.0 29.02.2024 50002421 Date of first issue: 29.02.2024

Ecological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

Toxicological information: The substance/mixture does not contain components considered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at levels of 0.1% or higher.

# **SECTION 3: Composition/information on ingredients**

#### 3.2 Mixtures

Components

Chemical name	CAS-No. EC-No. Index-No.	Classification	Concentration (% w/w)
disodium [[N,N'-ethylenebis[N-(carboxymethyl)glycinato]](4-)-N,N',O,O',ON,ON']cuprate(2-)	Registration number 14025-15-1 237-864-5	Acute Tox. 4; H302 Eye Irrit. 2; H319  Acute toxicity estimate  Acute oral toxicity: 890 mg/kg	>= 10 - < 20
boric acid	10043-35-3 233-139-2 005-007-00-2	Repr. 1B; H360FD	>= 1 - < 10

For explanation of abbreviations see section 16.

# **SECTION 4: First aid measures**

#### 4.1 Description of first aid measures

General advice : Move out of dangerous area.

Show this safety data sheet to the doctor in attendance.

Do not leave the victim unattended.

If inhaled : Remove to fresh air.

If unconscious, place in recovery position and seek medical

advice.

If experiencing any discomfort, immediately remove from exposure. Light cases: Keep person under surveillance. Get medical attention immediately if symptoms develop. Serious cases: Get medical attention immediately or call for an ambu-

lance.

In case of skin contact : If on clothes, remove clothes.

If on skin, rinse well with water.

Wash off with soap and plenty of water.

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



#### LM VERSION 1.2

Version Revision Date: SDS Number: Date of last issue: -

1.0 29.02.2024 50002421 Date of first issue: 29.02.2024

Get medical attention if irritation develops and persists.

In case of eye contact : Immediately flush eye(s) with plenty of water.

Remove contact lenses. Protect unharmed eye.

Keep eye wide open while rinsing.

If eye irritation persists, consult a specialist.

If swallowed : Do not induce vomiting without medical advice.

Keep respiratory tract clear.

Do not give milk or alcoholic beverages.

Never give anything by mouth to an unconscious person.

Take victim immediately to hospital.

4.2 Most important symptoms and effects, both acute and delayed

Risks : Causes serious eye irritation.

May damage fertility. May damage the unborn child.

4.3 Indication of any immediate medical attention and special treatment needed

Treatment : Treat symptomatically.

Immediate medical attention is required in case of ingestion.

**SECTION 5: Firefighting measures** 

5.1 Extinguishing media

Suitable extinguishing media : Water spray, fog, or regular foam.

Unsuitable extinguishing

media

Do not spread spilled material with high-pressure water

streams.

5.2 Special hazards arising from the substance or mixture

Specific hazards during fire-

fighting

Do not allow run-off from fire fighting to enter drains or water

courses.

Hazardous combustion prod: :

ucts

Fire may produce irritating, corrosive and/or toxic gases.

Carbon oxides

Nitrogen oxides (NOx)

Sulphur oxides Boron oxides

5.3 Advice for firefighters

Special protective equipment :

for firefighters

Wear self-contained breathing apparatus for firefighting if nec-

essary.

Further information : Collect contaminated fire extinguishing water separately. This

must not be discharged into drains.

Fire residues and contaminated fire extinguishing water must

be disposed of in accordance with local regulations.

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



#### LM VERSION 1.2

Version Revision Date: SDS Number: Date of last issue: -

1.0 29.02.2024 50002421 Date of first issue: 29.02.2024

#### **SECTION 6: Accidental release measures**

#### 6.1 Personal precautions, protective equipment and emergency procedures

Personal precautions : Use personal protective equipment.

Avoid dust formation. Avoid breathing dust.

If it can be safely done, stop the leak.

Keep people away from and upwind of spill/leak.

Remove all sources of ignition.

Immediately evacuate personnel to safe areas.

Ensure adequate ventilation.

Never return spills in original containers for re-use.

Mark the contaminated area with signs and prevent access to

unauthorized personnel.

Only qualified personnel equipped with suitable protective

equipment may intervene.

#### 6.2 Environmental precautions

Environmental precautions : Prevent product from entering drains.

Prevent further leakage or spillage if safe to do so.

If the product contaminates rivers and lakes or drains inform

respective authorities.

#### 6.3 Methods and material for containment and cleaning up

Methods for cleaning up : Keep in suitable, closed containers for disposal.

# 6.4 Reference to other sections

See sections: 7, 8, 11, 12 and 13.

# **SECTION 7: Handling and storage**

#### 7.1 Precautions for safe handling

Advice on safe handling : Avoid formation of respirable particles.

Do not breathe vapours/dust.

Avoid exposure - obtain special instructions before use.

Avoid contact with skin and eyes. For personal protection see section 8.

Smoking, eating and drinking should be prohibited in the ap-

plication area.

Dispose of rinse water in accordance with local and national

regulations.

Advice on protection against :

fire and explosion

Avoid dust formation. Provide appropriate exhaust ventilation

at places where dust is formed.

Hygiene measures : When using do not eat or drink. When using do not smoke.

Wash hands before breaks and at the end of workday.

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



# LM VERSION 1.2

Version Revision Date: SDS Number: Date of last issue: -

1.0 29.02.2024 50002421 Date of first issue: 29.02.2024

#### 7.2 Conditions for safe storage, including any incompatibilities

Requirements for storage areas and containers

 Keep container tightly closed in a dry and well-ventilated place. Observe label precautions. Electrical installations / working materials must comply with the technological safety

standards.

Further information on stor-

age conditions

Store in closed, labelled containers. The storage room should be constructed of incombustible material, closed, dry, ventilated and with impermeable floor, without access of unauthorised persons or children. The room should only be used for storage of chemicals. Food, drink, feed and seed should not be present. A hand wash station should be available. Protect from heat and direct sunlight. Protect from moisture and ex-

tremes of heat and cold.

Storage class (TRGS 510) : 6.1C

Further information on stor-

age stability

No decomposition if stored and applied as directed.

7.3 Specific end use(s)

Specific use(s) : Use only in accordance with the instruction manual.

#### **SECTION 8: Exposure controls/personal protection**

# 8.1 Control parameters

# **Occupational Exposure Limits**

Components	CAS-No.	Value type (Form of exposure)	Control parameters	Basis
boric acid	10043-35-3	AGW (Inhalable fraction)	0,5 mg/m3 (Borate)	DE TRGS 900
	Peak-limit: excursion factor (category): 2;(I)			
	Further information: When there is compliance with the OEL and biological tolerance values, there is no risk of harming the unborn child			

#### Derived No Effect Level (DNEL) according to Regulation (EC) No. 1907/2006:

Substance name	End Use	Exposure routes	Potential health ef-	Value
			fects	
disodium [[N,N'- ethylenediylbis[N- (carboxylatome- thyl)glycinato]](4-)- N,N',O,O',ON,ON']zin cate(2-)	Workers	Inhalation	Long-term systemic effects	30 mg/m3
	Workers	Inhalation	Acute local effects	10 mg/m3
	Workers	Dermal	Long-term systemic effects	62500 mg/kg
	Consumers	Inhalation	Long-term systemic effects	7,5 mg/m3

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



# **LM VERSION 1.2**

Version Revision Date: SDS Number: Date of last issue: -

1.0 29.02.2024 50002421 Date of first issue: 29.02.2024

	Consumers	Dermal	Long-term systemic effects	31250 mg/kg
	Consumers	Oral	Long-term systemic effects	6,25 mg/kg
magnesium sulphate	Workers	Inhalation	Long-term systemic effects	37,6 mg/m3
	Workers	Dermal	Long-term systemic effects	21,3 mg/kg bw/day
	Consumers	Inhalation	Long-term systemic effects	11,1 mg/m3
	Consumers	Dermal	Long-term systemic effects	12,8 mg/kg bw/day
	Consumers	Oral	Long-term systemic effects	12,8 mg/kg bw/day
boric acid	Workers	Inhalation	Long-term systemic effects	8,3 mg/m3
	Workers	Dermal	Long-term systemic effects	392 mg/kg bw/day
	Consumers	Inhalation	Long-term systemic effects	4,15 mg/m3
	Consumers	Dermal	Long-term systemic effects	196 mg/kg bw/day
	Consumers	Oral	Long-term systemic effects	0,98 mg/kg bw/day
	Consumers	Oral	Acute local effects	0,98 mg/kg bw/day

# Predicted No Effect Concentration (PNEC) according to Regulation (EC) No. 1907/2006:

Substance name	Environmental Compartment	Value
disodium [[N,N'-	Fresh water	2,97 mg/l
ethylenediylbis[N-		
(carboxylatomethyl)glycinato]](4-		
)-N,N',O,O',ON,ON']zincate(2-)		
	Marine water	0,3 mg/l
	Sewage treatment plant	66 mg/l
	Soil	0,21 mg/kg
	Intermittent use/release	1,1 mg/l
magnesium sulphate	Fresh water	0,68 mg/l
	Intermittent use (freshwater)	6,8 mg/l
	Marine water	0,068 mg/l
	Sewage treatment plant	10 mg/l
boric acid	Fresh water	2,9 mg/l
	Marine water	2,9 mg/l
	Sewage treatment plant	10 mg/l
	Soil	5,7 mg/kg dry
		weight (d.w.)
	Intermittent use (freshwater)	13,7 mg/l

# 8.2 Exposure controls

# Personal protective equipment

Eye/face protection : Eye wash bottle with pure water

Tightly fitting safety goggles

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



#### LM VERSION 1.2

Version Revision Date: SDS Number: Date of last issue: -

1.0 29.02.2024 50002421 Date of first issue: 29.02.2024

Wear face-shield and protective suit for abnormal processing

problems.

Hand protection

Material : Wear chemical resistant gloves, such as barrier laminate,

butyl rubber or nitrile rubber.

Remarks : The suitability for a specific workplace should be discussed

with the producers of the protective gloves.

Skin and body protection : Dust impervious protective suit

Choose body protection according to the amount and concentration of the dangerous substance at the work place.

Respiratory protection : In the case of dust or aerosol formation use respirator with an

approved filter.

Protective measures : Plan first aid action before beginning work with this product.

Always have on hand a first-aid kit, together with proper in-

structions.

Wear suitable protective equipment. When using do not eat, drink or smoke.

In the context of professional plant protection use as recommended, the end user must refer to the label and the instruc-

tions for use.

#### **SECTION 9: Physical and chemical properties**

#### 9.1 Information on basic physical and chemical properties

Physical state : solid

Form : granules

Colour : green

Odour : weak, characteristic

Melting point/freezing point : No data available

Boiling point/boiling range : No data available

Flammability : No data available

Upper explosion limit / Upper : No data available

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



# LM VERSION 1.2

Version Revision Date: SDS Number: Date of last issue: -

1.0 29.02.2024 50002421 Date of first issue: 29.02.2024

flammability limit

Lower explosion limit / Lower :

flammability limit

No data available

Flash point : No data available

Decomposition temperature : No data available

pH : 5-6

Concentration: 1 % (1% solution in water)

Viscosity

Viscosity, kinematic : Not applicable

Solubility(ies)

Water solubility : soluble

Partition coefficient: n-

octanol/water

Not available for this mixture.

Vapour pressure : Not available for this mixture.

Density : 1 g/cm3

Relative vapour density : Not applicable

Particle characteristics

Particle size : No data available

9.2 Other information

Explosives : Not explosive

Dust may form explosive mixture in air.

Self-ignition : Not applicable

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



#### LM VERSION 1.2

Version Revision Date: SDS Number: Date of last issue: -

1.0 29.02.2024 50002421 Date of first issue: 29.02.2024

**SECTION 10: Stability and reactivity** 

10.1 Reactivity

No decomposition if stored and applied as directed.

10.2 Chemical stability

No decomposition if stored and applied as directed.

10.3 Possibility of hazardous reactions

Hazardous reactions : No decomposition if stored and applied as directed.

Dust may form explosive mixture in air.

10.4 Conditions to avoid

Conditions to avoid : Heat, flames and sparks.

Extremes of temperature and direct sunlight.

Exposure to moisture Avoid dust formation.

10.5 Incompatible materials

Materials to avoid : Avoid strong acids, bases, and oxidizers

Metals

10.6 Hazardous decomposition products

Stable under recommended storage conditions.

**SECTION 11: Toxicological information** 

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

**Acute toxicity** 

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

**Product:** 

Acute oral toxicity : Acute toxicity estimate: > 2.000 mg/kg

Method: Calculation method

Components:

 $\label{linear_$ 

Acute oral toxicity : LD50 (Rat): 890 mg/kg

Acute inhalation toxicity : LC50 (Rat): > 5,3 mg/l

Exposure time: 4 h

Test atmosphere: dust/mist

boric acid:

Acute oral toxicity : LD50 (Rat, male): > 2.600 mg/kg

10/21

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



#### LM VERSION 1.2

Version Revision Date: SDS Number: Date of last issue: -

1.0 29.02.2024 50002421 Date of first issue: 29.02.2024

Method: OECD Test Guideline 401

Remarks: no mortality

Acute inhalation toxicity : LC0 (Rat, male and female): > 2,03 mg/l

Exposure time: 5 h

Test atmosphere: dust/mist

Method: OECD Test Guideline 403

Remarks: no mortality

Acute dermal toxicity : LD50 (Rabbit, male and female): > 2.000 mg/kg

Remarks: no mortality

#### Skin corrosion/irritation

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

#### **Components:**

boric acid:

Species : Rabbit

Result : No skin irritation

#### Serious eye damage/eye irritation

Causes serious eye irritation.

#### Components:

# $\label{linear_continuity} disodium~\cite{N-(carboxymethyl)glycinato]} \end{subarray} (4-)-N,N',O,O',ON,ON'] cuprate (2-):$

Assessment : Irritating to eyes.

boric acid:

Species : Rabbit Result : slight irritation

#### Respiratory or skin sensitisation

#### Skin sensitisation

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

#### Respiratory sensitisation

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

#### **Components:**

#### boric acid:

Test Type : Buehler Test Species : Guinea pig

Method : OECD Test Guideline 406

Result : Does not cause skin sensitisation.

# Germ cell mutagenicity

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

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



#### LM VERSION 1.2

Version Revision Date: SDS Number: Date of last issue: -

1.0 29.02.2024 50002421 Date of first issue: 29.02.2024

**Components:** 

boric acid:

Genotoxicity in vitro : Test Type: reverse mutation assay

Result: negative

Test Type: sister chromatid exchange assay

Result: negative

Test Type: gene mutation test

Result: negative

Genotoxicity in vivo : Test Type: Micronucleus test

Species: Mouse (male and female)

Application Route: Oral

Result: negative

Germ cell mutagenicity- As-

sessment

Weight of evidence does not support classification as a germ

cell mutagen.

#### Carcinogenicity

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

**Components:** 

boric acid:

Species : Mouse, male and female

Application Route : Oral Exposure time : 103 weeks

Dose : 0, 446, 1150mg/kg/bw/day

: > 1.150 mg/kg bw/day

Result : negative

Carcinogenicity - Assess-

ment

Weight of evidence does not support classification as a car-

cinogen

#### Reproductive toxicity

May damage fertility. May damage the unborn child.

**Components:** 

boric acid:

Effects on fertility : Test Type: Three-generation study

Species: Rat, male and female

Application Route: Oral

Dose: 5.9, 17.5, 58.5(mgb)/kg/bw/d

General Toxicity - Parent: LOAEL: 58,5 mg/kg bw/day General Toxicity F1: LOAEL: 58,5 mg/kg bw/day General Toxicity F2: LOAEL: 58,5 mg/kg bw/day

Result: negative

Effects on foetal develop- : Test Type: reproductive and developmental toxicity study

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



#### LM VERSION 1.2

Version Revision Date: SDS Number: Date of last issue: -

1.0 29.02.2024 50002421 Date of first issue: 29.02.2024

ment Species: Rat

**Application Route: Oral** 

Dose: 3.3, 6.3, 9.6, 13.3, 25mgb/kg

General Toxicity Maternal: LOAEL: 13,3 mg/kg bw/day Embryo-foetal toxicity: NOAEL: >= 12,9 mg/kg bw/day

Method: OECD Test Guideline 414

Result: negative

Reproductive toxicity - As-

sessment

Clear evidence of adverse effects on sexual function and fertil-

ity, and/or on development, based on animal experiments

#### STOT - single exposure

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

#### STOT - repeated exposure

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

#### **Components:**

#### boric acid:

Assessment : The substance or mixture is not classified as specific target

organ toxicant, repeated exposure.

#### Repeated dose toxicity

#### **Components:**

# boric acid:

Species : Rat, male and female LOAEL : 58.5 mg/kg bw/day

Application Route : Oral - feed Exposure time : 2 years

Dose : 0, 5.9, 17.5, 58.5mg/kg/bw/d

Species : Rat, female NOAEC : 0,47 mg/l

Application Route : inhalation (dust/mist/fume)
Dose : .077, .175, .47 mg/l

#### **Aspiration toxicity**

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

#### 11.2 Information on other hazards

# **Endocrine disrupting properties**

#### **Product:**

Assessment : The substance/mixture does not contain components consid-

ered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at

levels of 0.1% or higher.

13 / 21

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



# LM VERSION 1.2

Version Revision Date: SDS Number: Date of last issue: -

1.0 29.02.2024 50002421 Date of first issue: 29.02.2024

**Further information** 

Product:

Remarks : No data available

**SECTION 12: Ecological information** 

12.1 Toxicity

**Components:** 

disodium [[N,N'-ethylenebis[N-(carboxymethyl)glycinato]](4-)-N,N',O,O',ON,ON']cuprate(2-):

Toxicity to fish : LC50 (Fish): 555 mg/l

Exposure time: 96 h

Toxicity to algae/aquatic

plants

EC10 (algae): 42,8 mg/l

Exposure time: 72 h

Toxicity to fish (Chronic tox-

icity)

NOEC: 25,7 mg/l

Exposure time: 35 d

Species: Fish

Toxicity to daphnia and other :

aquatic invertebrates (Chron-

ic toxicity)

NOEC: 25 mg/l Exposure time: 21 d

Species: Crustaceans

**Ecotoxicology Assessment** 

Chronic aquatic toxicity : Toxic effects cannot be excluded

boric acid:

Toxicity to fish : LC50 (Pimephales promelas (fathead minnow)): 79,7 mg/l

Exposure time: 96 h Test Type: static test

Remarks: Based on data from similar materials

LC50 (Limanda limanda): 74 mg/l

Exposure time: 96 h

Test Type: flow-through test

Remarks: Based on data from similar materials

Toxicity to daphnia and other :

aquatic invertebrates

LC50 (Ceriodaphnia dubia (water flea)): 102 mg/l

Exposure time: 48 h Test Type: static test

Toxicity to algae/aquatic

plants

EC50 (Pseudokirchneriella subcapitata (green algae)): 40,2

mg/l

Exposure time: 74,5 h

Method: OECD Test Guideline 201

NOEC (Pseudokirchneriella subcapitata (green algae)): 17,5

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



#### LM VERSION 1.2

Version Revision Date: SDS Number: Date of last issue: -

1.0 29.02.2024 50002421 Date of first issue: 29.02.2024

mg/l

Exposure time: 74,5 h

Method: OECD Test Guideline 201

LOEC: 3,6 mg/l Exposure time: 10 d Test Type: semi-static test

Toxicity to microorganisms : EC50 (activated sludge): > 175 mg/l

Exposure time: 3 h

Method: OECD Test Guideline 209

NOEC (activated sludge): 17,5 mg/l

Exposure time: 3 h

Method: OECD Test Guideline 209

Toxicity to fish (Chronic tox-

icity)

NOEC: 6,4 mg/l

Exposure time: 34 d

Species: Danio rerio (zebra fish) Method: OECD Test Guideline 210

Toxicity to daphnia and other : aquatic invertebrates (Chron-

ic toxicity)

NOEC: 6,4 mg/l Exposure time: 21 d

Species: Daphnia magna (Water flea)

Test Type: semi-static test

Toxicity to soil dwelling or-

ganisms

LC50: > 175 mg/kg Exposure time: 14 d

Species: Eisenia fetida (earthworms) Method: OECD Test Guideline 207

NOEC: >= 175 mg/kg Exposure time: 14 d

Species: Eisenia fetida (earthworms) Method: OECD Test Guideline 207

# 12.2 Persistence and degradability

No data available

#### 12.3 Bioaccumulative potential

# **Components:**

boric acid:

Bioaccumulation : Species: Fish

Exposure time: 60 d

Bioconcentration factor (BCF): < 0,1

Partition coefficient: n-

octanol/water

log Pow: -1,09 (22 °C)

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



#### LM VERSION 1.2

Version Revision Date: SDS Number: Date of last issue: -

1.0 29.02.2024 50002421 Date of first issue: 29.02.2024

#### 12.4 Mobility in soil

No data available

#### 12.5 Results of PBT and vPvB assessment

**Product:** 

Assessment : This substance/mixture contains no components considered

to be either persistent, bioaccumulative and toxic (PBT), or very persistent and very bioaccumulative (vPvB) at levels of

0.1% or higher.

#### 12.6 Endocrine disrupting properties

**Product:** 

Assessment : The substance/mixture does not contain components consid-

ered to have endocrine disrupting properties according to REACH Article 57(f) or Commission Delegated regulation (EU) 2017/2100 or Commission Regulation (EU) 2018/605 at

levels of 0.1% or higher.

#### 12.7 Other adverse effects

**Product:** 

Additional ecological infor-

mation

: No data available

# **SECTION 13: Disposal considerations**

#### 13.1 Waste treatment methods

Product : Do not dispose of waste into sewer.

Do not contaminate ponds, waterways or ditches with chemi-

cal or used container.

Send to a licensed waste management company.

Contaminated packaging : Empty remaining contents.

Do not re-use empty containers.

Packaging that is not properly emptied must be disposed of as

the unused product.

Empty containers should be taken to an approved waste han-

dling site for recycling or disposal.

#### **SECTION 14: Transport information**

#### 14.1 UN number or ID number

ADN : Not regulated as a dangerous good
ADR : Not regulated as a dangerous good
RID : Not regulated as a dangerous good

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



#### LM VERSION 1.2

Version Revision Date: SDS Number: Date of last issue: -

1.0 29.02.2024 50002421 Date of first issue: 29.02.2024

IMDG : Not regulated as a dangerous goodIATA : Not regulated as a dangerous good

14.2 UN proper shipping name

ADN : Not regulated as a dangerous good
ADR : Not regulated as a dangerous good
RID : Not regulated as a dangerous good
IMDG : Not regulated as a dangerous good
IATA : Not regulated as a dangerous good

14.3 Transport hazard class(es)

ADN : Not regulated as a dangerous good
ADR : Not regulated as a dangerous good
RID : Not regulated as a dangerous good
IMDG : Not regulated as a dangerous good
IATA : Not regulated as a dangerous good

14.4 Packing group

ADN : Not regulated as a dangerous good
ADR : Not regulated as a dangerous good
RID : Not regulated as a dangerous good
IMDG : Not regulated as a dangerous good
IATA (Cargo) : Not regulated as a dangerous good
IATA (Passenger) : Not regulated as a dangerous good

#### 14.5 Environmental hazards

Not regulated as a dangerous good

#### 14.6 Special precautions for user

Remarks : Not classified as dangerous in the meaning of transport regu-

lations.

## 14.7 Maritime transport in bulk according to IMO instruments

Not applicable for product as supplied.

# **SECTION 15: Regulatory information**

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

REACH - Restrictions on the manufacture, placing on the market and use of certain dangerous substances, mixtures and articles (Annex XVII) Conditions of restriction for the following entries should be considered: Number on list 75

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



# LM VERSION 1.2

Version Revision Date: SDS Number: Date of last issue: -

1.0 29.02.2024 50002421 Date of first issue: 29.02.2024

If you intend to use this product as tattoo ink, please contact your ven-

dor.

boric acid (Number on list 30)

REACH - Candidate List of Substances of Very High

Concern for Authorisation (Article 59).

boric acid

Regulation (EC) No 1005/2009 on substances that de-

plete the ozone layer

Not applicable

Regulation (EU) 2019/1021 on persistent organic pollu-

tants (recast)

Not applicable

Regulation (EC) No 649/2012 of the European Parliament and the Council concerning the export and import

of dangerous chemicals

Not applicable

REACH - List of substances subject to authorisation

(Annex XIV)

: Not applicable

Seveso III: Directive 2012/18/EU of the European Parliament and of the Council on the control of major-accident hazards involving

dangerous substances.

Not applicable

Water hazard class (Germa:

ny)

WGK 3 highly hazardous to water

Classification according to AwSV, Annex 1 (5.2)

TA Luft List (Germany) : 5.2.1: Total dust:

Not applicable

5.2.2: Inorganic substances in powdered form:

Not applicable

5.2.4: Inorganic substances in gaseous form:

Not applicable

5.2.5: Organic Substances:

Not applicable

5.2.7.1.1: Carcinogenic substance:

Not applicable

5.2.7.1.1: Quartz fine dust PM4:

Not applicable

5.2.7.1.1: Formaldehyde:

Not applicable 5.2.7.1.1: fibres: Not applicable

5.2.7.1.2: Germ cell mutagens:

Not applicable

5.2.7.1.3: Substances toxic to reproduction:

others: 8,88 % boric acid

5.2.7.2: Poorly degradable, easily enrichable and highly toxic

organic substances:

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



#### LM VERSION 1.2

Version Revision Date: SDS Number: Date of last issue: -

1.0 29.02.2024 50002421 Date of first issue: 29.02.2024

Not applicable

# Other regulations:

Take note of Law on the protection of mothers at work, in education and in studies (Maternity Protection Act - MuSchG).

Take note of Directive 94/33/EC on the protection of young people at work or stricter national regulations, where applicable.

The product is subject to the supply restrictions of the Ordinance on the Prohibition of Chemicals.

#### The components of this product are reported in the following inventories:

TCSI : On the inventory, or in compliance with the inventory

TSCA : All substances listed as active on the TSCA inventory

AIIC : On the inventory, or in compliance with the inventory

DSL : All components of this product are on the Canadian DSL

ENCS : On the inventory, or in compliance with the inventory

ISHL : On the inventory, or in compliance with the inventory

KECI : Not in compliance with the inventory

PICCS : Not in compliance with the inventory

IECSC : On the inventory, or in compliance with the inventory

NZIoC : Not in compliance with the inventory

TECI: Not in compliance with the inventory

# 15.2 Chemical safety assessment

No Chemical Safety Assessment has been carried out for this mixture.

#### **SECTION 16: Other information**

#### **Full text of H-Statements**

H302 : Harmful if swallowed.

H319 : Causes serious eye irritation.

H360FD : May damage fertility. May damage the unborn child.

#### Full text of other abbreviations

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



#### LM VERSION 1.2

Version Revision Date: SDS Number: Date of last issue: -

1.0 29.02.2024 50002421 Date of first issue: 29.02.2024

Acute Tox. : Acute toxicity Eye Irrit. : Eye irritation

Repr. : Reproductive toxicity

DE TRGS 900 : Germany. TRGS 900 - Occupational exposure limit values.

DE TRGS 900 / AGW : Time Weighted Average

ADN - European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways; ADR - Agreement concerning the International Carriage of Dangerous Goods by Road: AIIC - Australian Inventory of Industrial Chemicals: ASTM - American Society for the Testing of Materials; bw - Body weight; CLP - Classification Labelling Packaging Regulation; Regulation (EC) No 1272/2008; CMR - Carcinogen, Mutagen or Reproductive Toxicant; DIN - Standard of the German Institute for Standardisation; DSL - Domestic Substances List (Canada); ECHA -European Chemicals Agency; EC-Number - European Community number; ECx - Concentration associated with x% response; ELx - Loading rate associated with x% response; EmS - Emergency Schedule; ENCS - Existing and New Chemical Substances (Japan); ErCx - Concentration associated with x% growth rate response; GHS - Globally Harmonized System; GLP - Good Laboratory Practice; IARC - International Agency for Research on Cancer; IATA - International Air Transport Association; IBC - International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk; IC50 - Half maximal inhibitory concentration; ICAO - International Civil Aviation Organization; IECSC - Inventory of Existing Chemical Substances in China; IMDG - International Maritime Dangerous Goods; IMO - International Maritime Organization; ISHL - Industrial Safety and Health Law (Japan); ISO - International Organisation for Standardization; KECI - Korea Existing Chemicals Inventory; LC50 - Lethal Concentration to 50 % of a test population; LD50 - Lethal Dose to 50% of a test population (Median Lethal Dose); MARPOL - International Convention for the Prevention of Pollution from Ships; n.o.s. - Not Otherwise Specified; NO(A)EC - No Observed (Adverse) Effect Concentration; NO(A)EL - No Observed (Adverse) Effect Level; NOELR - No Observable Effect Loading Rate; NZIoC - New Zealand Inventory of Chemicals; OECD - Organization for Economic Co-operation and Development; OPPTS - Office of Chemical Safety and Pollution Prevention; PBT - Persistent, Bioaccumulative and Toxic substance: PICCS - Philippines Inventory of Chemicals and Chemical Substances: (Q)SAR - (Quantitative) Structure Activity Relationship; REACH - Regulation (EC) No 1907/2006 of the European Parliament and of the Council concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals; RID - Regulations concerning the International Carriage of Dangerous Goods by Rail; SADT - Self-Accelerating Decomposition Temperature; SDS - Safety Data Sheet; SVHC - Substance of Very High Concern; TCSI - Taiwan Chemical Substance Inventory; TECI -Thailand Existing Chemicals Inventory; TRGS - Technical Rule for Hazardous Substances; TSCA - Toxic Substances Control Act (United States); UN - United Nations; vPvB - Very Persistent and Very Bioaccumulative

#### **Further information**

Classification of the mixture: Classification procedure:

Eye Irrit. 2 H319 Calculation method Repr. 1B H360FD Calculation method

#### **Disclaimer**

FMC Corporation believes that the information and recommendations contained herein (including data and statements) are accurate as of the date hereof. You can contact FMC Corporation to ensure that this document is the most current available from FMC Corporation. No warranty of fitness for any particular purpose, warranty of merchantability or any other warranty, expressed or implied, is made concerning the information provided herein. The information provided herein relates only to the specified product designated and may not be applicable where such product is used in combination with

according to Regulation (EC) No. 1907/2006, as amended by Commission Regulation (EU) 2020/878



# LM VERSION 1.2

Version Revision Date: SDS Number: Date of last issue: -

1.0 29.02.2024 50002421 Date of first issue: 29.02.2024

any other materials or in any process. The user is responsible for determining whether the product is fit for a particular purpose and suitable for the user's conditions and methods of use. Since the conditions and methods of use are beyond the control of FMC Corporation, FMC Corporation expressly disclaims any and all liability as to any results obtained or arising from any use of the products or reliance on such information.

# **Prepared by**

**FMC** Corporation

FMC and the FMC Logo are trademarks of FMC Corporation and/or an affiliate.

© 2021-2024 FMC Corporation. All Rights Reserved.

**DE / 6N**