
VALAGRO SDS

Date: April 17, 2018 Rev.1.0

Product: Hidromix S

Code: 11717

Print Date: April 17, 2018

SAFETY DATA SHEET

HIDROMIX S

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

1.1. Product identifier

Mixture identification:

Trade name: Hidromix S

Trade code: 11717

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

Recommended use:

Fertilizer

1.3. Details of the supplier of the safety data sheet

AGRITRADE

411 Blenheim Rd

Sockburn

Christchurch 8140

Ph 03 341 4587

Fax 03 341 4584

Free Phone 0800 333 855

agritrade@nzagritrade.co.nz

1.4. Emergency telephone number:

- AGRITRADE- Tel. 0800 333 855

- NZ POISON CENTRE CONTACT:

111 Police, Ambulance and Fire Brigade (available in New Zealand only)

0800 764 766 (National Poisons Information Centre)

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Classification according to the Hazardous Substances (Minimum Degrees of Hazard) Regulations 2001, New Zealand:

The product is not classified as dangerous

EC regulation criteria 1272/2008 (CLP):

The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP).

Adverse physicochemical, human health and environmental effects:

No other hazards

2.2. Label elements

The product is not classified as dangerous according to Regulation EC 1272/2008 (CLP).

Symbols:

None

Hazard statements:

None

Precautionary statements:

None

Special Provisions:

None

VALAGRO SDS

Date: April 17, 2018 Rev.1.0

Product: Hidromix S

Code: 11717

Print Date: April 17, 2018

Special provisions according to Annex XVII of REACH and subsequent amendments:

None

2.3. Other hazards

vPvB Substances: None - PBT Substances: None

Other Hazards:

No other hazards

SECTION 3: Composition/information on ingredients

3.1. Substances

N.A.

3.2. Mixtures:

Name	Product identifier	%	Approval Status (NZIoC)
Boric acid	CAS:10043-35-3 EC: 10043-35-3	3 - <4.5	HSNO Approval Code HSR002995
Copper EDTA	CAS: 14025-15-1 EC: 237-864-5	1 - <3	HSNO Approval Code HSR003697

SVHC Substances:

>= 3% - < 4,5% boric acid

Index number: 005-007-00-2, CAS: 10043-35-3, EC: 233-139-2

Substance SVHC

For full text of H-statements: see SECTION 16

SECTION 4: First aid measures

4.1. Description of first aid measures

In case of skin contact:

Immediately take off all contaminated clothing.

Areas of the body that have - or are only even suspected of having - come into contact with the product must be rinsed immediately with plenty of running water and possibly with soap.

Wash thoroughly the body (shower or bath).

Remove contaminated clothing immediately and dispose off safely.

After contact with skin, wash immediately with soap and plenty of water.

In case of eyes contact:

After contact with the eyes, rinse with water with the eyelids open for a sufficient length of time, then consult an ophthalmologist immediately.

Protect uninjured eye.

In case of Ingestion:

Never give anything by mouth to an unconscious person; If person is conscious rinse mouth with water and then give plenty of water to drink. Do not induce vomiting unless instructed to do so by medical personnel. OBTAIN A MEDICAL EXAMINATION IMMEDIATELY.

In case of Inhalation:

Remove casualty to fresh air and keep warm and at rest.

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

Possible symptoms that may occur:

VALAGRO SDS

Date: April 17, 2018 Rev.1.0

Product: Hidromix S

Code: 11717

Print Date: April 17, 2018

Inhalation: may cause irritation to the respiratory tract

Symptoms: cough, shortness of breath

Ingestion:

The product dissolved in water or in presence of moisture, cause an acid reaction and if swallowed can cause irritation and burns of the mouth, throat and digestive tract.

Symptoms: vomiting, abdominal pain, gastrointestinal disorders

Contact with skin:

May cause irritation to the skin

Symptoms: redness, itching, pain.

Contact with eyes:

Causes eye irritation

Symptoms include pain and redness

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

In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

Treatment:

None

SECTION 5: Firefighting measures**5.1. Extinguishing media**

Suitable extinguishing media:

Water.

Carbon dioxide (CO₂).

Extinguishing media which must not be used for safety reasons:

None in particular.

5.2. Special hazards arising from the substance or mixture

Do not inhale explosion and combustion gases.

Burning produces heavy smoke containing carbon oxides, nitrogen oxides

5.3. Advice for firefighters

Wear suitable personal protective equipment and self-contained breathing apparatus.

Collect contaminated fire extinguishing water separately. This must not be discharged into drains.

Move undamaged containers from immediate hazard area if it can be done safely.

Protective clothing for firefighters (full protective suit, helmet, gloves, boots) must conform to the standard EN469

SECTION 6: Accidental release measures**6.1. Personal precautions, protective equipment and emergency procedures**

- For non-emergency personnel:

No action shall be taken involving any personal risk or without suitable training.

Wear protective clothes giving a total skin protection, gloves, safety glasses and ask with filter P2

Keep away from the affected area people not involved in the emergency intervention.

Ensure adequate ventilation, move people in a safe place.

Alert the internal emergency team.

- For emergency responders:

Wear protective clothes giving a total skin protection, gloves, safety glasses and mask with filter P2.

Ensure adequate ventilation, move people in a safe place.

See protective measures under point 7 and 8.

VALAGRO SDS

Date: April 17, 2018 Rev.1.0

Product: Hidromix S

Code: 11717

Print Date: April 17, 2018

Avoid dust generation

Dusts at sufficient concentrations can form explosive mixtures with air

Avoid any accumulation of electrostatic charge

6.2. Environmental precautions

Do not allow to enter into soil/subsoil. Do not allow to enter into surface water or drains.

Retain contaminated washing water and dispose it in landfill approved;

If possible, collect in clean plastic containers labeled and reuse as fertilizer.

In case of gas escape or of entry into waterways, soil or drains, inform the responsible authorities.

Suitable material for taking up: absorbing material, soil, sand.

6.3. Methods and material for containment and cleaning up

Collect the product for example using shovel and broom

Avoid raising dust

Wash with plenty of water, contain the spill with absorbent material, earth, sand.

6.4. Reference to other sections

See also section 8 and 13

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Avoid contact with skin and eyes, inhalation of vapours and mists.

Don't use empty container before they have been cleaned.

Before making transfer operations, assure that there aren't any incompatible material residuals in the containers.

Contaminated clothing should be changed before entering eating areas.

Do not eat or drink while working.

See also section 8 for recommended protective equipment.

7.2. Conditions for safe storage, including any incompatibilities

Keep in original containers tightly closed in a well-ventilated place far from humidity and heat source

Keep away from food, drink and feed.

Incompatible materials:

Strong oxidants.

Instructions as regards storage premises:

Adequately ventilated premises.

7.3. Specific end use(s)

None in particular

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

No occupational exposure limit available

For dust, in general:

ACGIH (2003) : recommended value inhalable dust: TLV/TWA: 10 mg/m³

ACGIH (2003) : recommended value breathable dust: TLV/TWA: 3 mg/m³

- Boric acid - CAS: 10043-35-3

OSHA / PEL (permissible exposure levels): 15 mg/m³ (total dust) and 5 mg/m³ (breathable dust).

DNELs (Derived No Effect Levels) for workers:

Worker-DNEL long-term inhalation, systemic = 8.3 mg/m³ (1.45 mg B/m³).

VALAGRO SDS

Date: April 17, 2018 Rev.1.0

Product: Hidromix S

Code: 11717

Print Date: April 17, 2018

Worker-DNEL long-term, skin, systemic = 27460 mg/day (B 4800 mg/day).

DNELs (Derived No Effect Levels) for population (consumers):

DNEL long-term, oral, systemic = 0.98 mg/kg body weight/day (0.17 mg B/kg body weight / day).

DNEL long-term inhalation, systemic = 4.15 mg/m³ (0.73 mg B/m³).

DNEL long-term dermal, systemic (external) = 196 mg/kg body weight/day (34.3 mg B/kg body weight/day).

DNEL long-term dermal, systemic = 0.98 mg/kg body weight/day (0.17 mg B/kg body weight/day).

PNECs (Predicted No Effect Concentrations):

PNECadd, water = 2.02 mg B/L (fresh water and sea water) and 13.7 mg B/L (water with intermittent releases).

PNECadd, sediment = No exposure expected.

PNECadd, soil = 5.4 mg B/kg soil weight daily.

PNEC STP (industrial waste water) = 10 mg B/L.

- Copper EDTA - CAS:14025-15-1

Substance name	OSHA PEL	Cal/OSHA PEL 8-hour TWA (ST) STEL (C) Ceiling TLV- STEL	NIOSH REL Up to 10-hour TWA (ST) STEL (C) Ceiling	ACGIH 2015 TLV
Copper (powder and smoke as Cu)	1 mg/m ³	1 mg/m ³	1 mg/m ³	1 mg/m ³

DNEL

Workers:

Inhalation exposure to long-term systemic effects

DNEL: 1.8 mg/m³

Skin systemic effects long-term exposure

DNEL 3750 mg / kg body weight/day

General Population:

Inhalation exposure to long-term systemic effects

DNEL: 0.45 mg/m³

Skin systemic effects long-term exposure

DNEL: 1875 mg/kg body weight /day

oral systemic effects long-term exposure

DNEL: 0.375 mg / kg body weight /day

PNEC

PNEC (freshwater) = 2.95 mg/L

PNEC aqua (sea water) = 0.3 mg/L

PNEC aqua (intermittent release) = 1.09 mg/L

PNEC STP = 65.4 mg/L

PNEC soil - Risk to terrestrial organisms = 0.21 mg/kg dw soil

8.2. Exposure controls

The personal protective equipment must be compliant to the regulation UNI - EN in force

Eye protection:

Use close fitting safety goggles according to the standard EN 166, don't use eye lens.

VALAGRO SDS

Date: April 17, 2018 Rev.1.0

Product: Hidromix S

Code: 11717

Print Date: April 17, 2018

Protection for skin:

Use clothing that provides comprehensive protection to the skin, e.g. cotton, rubber, PVC or viton.

Protection for hands:

Use protective nitrile gloves that provides comprehensive protection according to EN 374.

Respiratory protection:

In case of dust generation, use anti-powder mask with P2 filters according to the EN 149:2001. The powder exposition limit must be respected

Thermal Hazards:

None

Environmental exposure controls:

Prevent the contamination of soil, surface water or groundwater

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Appearance and colour: yellow/brown microgranules

Odour: odorless

Odour threshold: not applicable

pH 1% at 20°C: 5,5

Melting point / freezing point: not applicable, solid

Initial boiling point and boiling range: not applicable, solid

Flash point: not applicable, solid

Evaporation rate: not applicable, solid

Solid/gas flammability: not applicable, the product doesn't contain any flammable substance

Upper/lower flammability or explosive limits: not applicable, the product doesn't contain any flammable or explosive substance

Vapour pressure: not applicable, solid

Vapour density: not applicable, solid

Apparent Density: 0,9-1,1 Kg/dm³

Solubility in water: 100 g/l at 20 °C

Solubility in oil: N.A.

Partition coefficient (n-octanol/water): N.A.

Auto-ignition temperature: N.A.

Decomposition temperature: N.A.

Viscosity: not applicable, solid

Explosive properties: not applicable, the product doesn't contain any explosive substance

Oxidizing properties: not applicable, the product doesn't contain any oxidizing substance

9.2. Other information

Miscibility: N.A.

Fat Solubility: N.A.

Conductivity: N.A.

Substance Groups relevant properties N.A.

SECTION 10: Stability and reactivity

10.1. Reactivity

Stable under normal conditions

10.2. Chemical stability

VALAGRO SDS

Date: April 17, 2018 Rev.1.0

Product: Hidromix S

Code: 11717

Print Date: April 17, 2018

- Stable under normal conditions
- 10.3. Possibility of hazardous reactions
It reacts with strong oxidizing agents.
Contact with hot surfaces may ignite the product
- 10.4. Conditions to avoid
Avoid heating the product at high temperatures
- 10.5. Incompatible materials
Strong oxidizing agents.
- 10.6. Hazardous decomposition products
In case of fire and high temperatures can develop carbon oxides, nitrogen oxides.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicological information of the mixture:

N.A.

Toxicological information of the main substances found in the mixture:

a) acute toxicity:

- Boric acid - CAS: 10043-35-3

Ingestion:

LD50 (Lethal Dose - lethal doses) in rats (Sprague-Dawley): 3450 mg/kg body weight (male) and 4080 mg/kg body weight (female), (test material: Boric acid).

LD50 male rat:> 2600 mg/kg body weight (Test material: boron trioxide, OECD Guideline 401 (Acute Oral Toxicity))

Inhalation: Low toxicity Acute Respiratory.

LC50 (5h) in rat (male / female):> 2.03 mg / L air. (Material Test: Boric acid, OECD Guideline 403 (Acute Inhalation Toxicity

Dermal toxicity: Low acute dermal toxicity.

LD50 rabbit (New Zealand White) (male / female):> 2000 mg / kg body weight. (Material Test: Boric acid, FIFRA (40 CFR 163))

- Copper EDTA - CAS: 14025-15-1

LD50 (Oral) = 890 mg / kg (test similar to OECD 403)

LD50 (dermal, rat)> 2000 mg / kg bw (OECD 402 read-across from Ethylenediaminetetraacetic acid ferric sodium salt)

4h-LC50 (inhalation)> 5.32 g / m³ (OECD 436)

b) skin corrosion/irritation:

- Boric acid - CAS: 10043-35-3

Studies on rabbits, corrosion / irritation: low absorption of boric acid through intact skin.

Based on the data available to the criteria for classification as corrosive / irritating skin are not satisfied.

- Copper EDTA - CAS: 14025-15-1

slightly irritating (test on rabbit: 50% aqueous solution, OECD 404)

c) serious eye damage/irritation:

- Boric acid - CAS: 10043-35-3

No evidence of corrosion (FIFRA guidelines (40 CFR 162) and TSCA (40 CFR 798).

The test material applied by washing every 24 hours on the eyes of New Zealand white rabbits causes conjunctival irritation and iris. (FIFRA guidelines (40 CFR 162) and TSCA (40 CFR 798). (FIFRA guidelines (40 CFR 162) and TSCA (40 CFR 798). Years of occupational exposure to disodium tetrahydrate octoborate showed no adverse effects on

VALAGRO SDS

Date: April 17, 2018 Rev.1.0

Product: Hidromix S

Code: 11717

Print Date: April 17, 2018

the human eye.

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

- Copper EDTA - CAS: 14025-15-1
irritating (Test on rabbit, OECD 405)

d) respiratory or skin sensitisation:

- Boric acid - CAS: 10043-35-3

Not skin sensitizer for guinea pigs, OECD Guideline 406 (Skin Sensitization).

Based on the available data, the classification criteria are not met as a sensitizer

- Copper EDTA - CAS: 14025-15-1
not sensitizing (test on rat, OECD 429 Local Lymph Node Assay)

e) germ cell mutagenicity:

- Boric acid - CAS: 10043-35-3

The bacterial reverse mutation test (Ames test) was performed on *S. typhimurium* TA 1535, TA 1537, TA 98 and TA 100. There was no mutagenic activity. (Material Test: Boric acid).

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

- Copper EDTA - CAS: 14025-15-1
not classified

f) carcinogenicity:

- Boric acid - CAS: 10043-35-3

The test performed according to OECD Guideline 451 B6C3F1 (mice treated in the diet for 103 weeks with Boric acid 0, 2500 or 5000 ppm) showed no evidence of carcinogenicity.

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

- Copper EDTA - CAS: 14025-15-1
non-carcinogenic (read-across from hydrogen 2,2', 2'', 2''' - (ethane-1,2-diylidinitrilo) tetraacetate)

g) reproductive toxicity:

- Boric acid - CAS: 10043-35-3

The exposure tests at 50 and 155 mg Borax Deca Hydrate/kg body weight (equivalent to 5.9 and 17.5 mg B/kg body weight) made of three generations of Sprague-Dawley rats showed no adverse effects on fertility, lactation, litter size, weight or other abnormalities of the unborn.

NOAEL (No Observed Adverse Effect Level) for fertility (male rats): 17.5 mg B/kg / day.

Rats exposed to doses of 518 mg Borax decahydrate / kg body weight (equivalent to 58.5 mg B / kg body weight) were infertile. Microscopic examination of the testes atrophied of all the males in this group showed no viable sperm. Furthermore, the examination of the ovaries in the female rats, exposed to 58.5 mg B / kg body weight has detected a decreased ovulation in most of the ovaries examined. None of the females exposed to high doses has generated pups as a result of mating with males in the control group.

LOAEL (Lowest Observed Adverse Effect Level) for fertility (rat female / male): 58.5 mg B / kg bw / day. The group of male and female rats at high dose (58.5 mg B / kg body weight) showed clinical signs of toxicity such as sleeping rough, scaly tail, respiratory distress and inflamed eyelids.

Based on the data obtained from this study it was concluded that the exposure of rats at levels up to 17.5 mg B / kg body weight does not cause adverse reproductive effects.

Animal feeding studies in rat, mouse and dog, at high doses, have demonstrated negative effects on fertility and testes, effects on the fetus, including fetal weight loss and minor skeletal variations.

Studies of workers exposed to high boron, have not shown any adverse effects on the developing fetus.

The Disodium octaborate tetrahydrate is autoclassificato as toxic for

VALAGRO SDS

Date: April 17, 2018 Rev.1.0

Product: Hidromix S

Code: 11717

Print Date: April 17, 2018

reproduction, Repro 1B, H360FD according to the new classification criteria of the EC Regulation 1272/2008 (CLP).

- Copper EDTA - CAS: 14025-15-1

NOEL reproduction and development \geq 500 mg/kg bw/day.

- h) STOT-single exposure:

- Boric acid - CAS: 10043-35-3

Based on the available data, the classification criteria as STOT-single exposure are not met.

- Copper EDTA - CAS: 14025-15-1
not classified

- i) STOT-repeated exposure:

- Boric acid - CAS: 10043-35-3

Repeated dose toxicity: 2-year feeding studies of Sprague Dawley rats (male / female) exposed to different concentrations of boric acid (0, 33 (5.9) 100 (17.5), 334 (58, 5) mg boric acid (B) / kg body weight daily) showed adverse effects such as: rough coat, hunched posture, fingers swollen, eyes inflamed and bleeding, atrophy testicular, degeneration of the seminiferous tubules, effects observed in animals exposed to the highest levels of boric acid.

NOAEL 17.5 mg boron / kg body weight / day

LOAEL 58.5 mg boron / kg body weight / day

There were no adverse effects in the group exposed to a minimum and medium level.

- Copper EDTA - CAS: 14025-15-1
not classified

- j) aspiration hazard:

- Boric acid - CAS: 10043-35-3

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

- Copper EDTA - CAS: 14025-15-1
unlikely event (solid)

Symptoms related to the physical, chemical and toxicological properties:

There are no known health effects of the mixture as a whole.

In base on the components present:

Inhalation: may cause irritation to the respiratory tract

Symptoms: cough, shortness of breath

Ingestion:

The product dissolved in water or in presence of moisture, cause an acid reaction and if swallowed can cause irritation and burns of the mouth, throat and digestive tract.

Symptoms: vomiting, abdominal pain, gastrointestinal disorders

Contact with skin:

May cause irritation to the skin

Symptoms: redness, itching, pain.

Contact with eyes:

Causes eye irritation

Symptoms include pain and redness

SECTION 12: Ecological information

VALAGRO SDS

Date: April 17, 2018 Rev.1.0

Product: Hidromix S

Code: 11717

Print Date: April 17, 2018

12.1. Toxicity

Adopt good working practices, so that the product is not released into the environment.

- Boric acid - CAS: 10043-35-3

Aquatic compartment

Short-term toxicity to fish:

Fathead minnow, *Pimephales promelas*: 96-hr LC50 = 79.7 mg B/L (mortality)

Long-term toxicity to fish:

Fathead minnow, *Pimephales promelas*:

32-d NOEC (No Observed Effect Concentration) = 11.2 mg B/L

32-d LOEC (Lowest Observed Effect Concentration) = 23 mg B/L

Short-term toxicity to aquatic invertebrates:

Daphnids, *Daphnia magna*: 48-hr LC50 = 133 mg B / L (mortality)

Long-term toxicity to aquatic invertebrates:

Daphnids, *Daphnia magna*: 21-d LC50 = 34 mg B / L

21-d LOEC = 56 mg B/L

Hyalella azteca: 42-d NOEC = 25.9 mg B / L

42-d LOEC = 51.1 mg B/L

Short-term toxicity to algae:

Green algae, *Pseudokirchneriella subcapitata*: 72-hr EC50 - biomass = 40 mg B/L (mortality)

Long-term toxicity to algae:

Blue-green algae, *Agmenellum quadruplicatum*: 10-d NOEC \geq 100 mg B/L (growth rate)

Toxicity to microorganisms:

The study was performed in accordance with OECD Guideline 209 (Activated Sludge, Respiration Inhibition Test). It was found an inhibitory effect on the respiratory rate of microorganisms:

3-hr EC50 = 175 mg B/L

3-hr EC20 = 112 mg B/L

3-hr EC10 = 35.4 mg B/L

3-d NOEC = 17.5 mg B/L

Bodies of sediment:

Chironomus riparius: 28-d NOEC = 180 mg B / kg sediment, daily weights (mortality)

28-d LOEC = 320 mg B / kg sediment, daily weights (mortality and emergency)

28-d LD50 = 278 mg B / kg sediment, daily weight (nominal)

Terrestrial compartment

Toxicity to terrestrial arthropods:

The study was performed in accordance with ISO 11267 (Inhibition of Reproduction of *Collembola* by Soil Pollutants) on the *Folsomia candida*, *Collembola*. The results obtained on artificial soil are:

28-d EC10 = 68.1 mg B / kg body weight (mortality)

28-d EC10 = 13.8 mg B / kg body weight (reproduction)

28-d EC50 = 26.1 mg B / kg body weight (reproduction)

28-d LC50 > 70 mg B / kg body weight

VALAGRO SDS

Date: April 17, 2018 Rev.1.0

Product: Hidromix S

Code: 11717

Print Date: April 17, 2018

Toxicity to terrestrial plants:

The studies were performed on different species of plants of the group of Monocotyledonae (as *Allium cepa*) and the Dicotyledonae (as *Brassica rapa*) with the following results:

Allium cepa, 7-d NOEC = 56 mg B / kg soil, daily weight (growth in length of the bud) - clay soil.

Brassica rapa, 5-d NOEC = 28 mg B / kg soil, daily weight (root growth) - artificial soil

Toxicity to soil microorganisms:

The study was performed in accordance with OECD Guideline 216 (Soil Microorganisms: Nitrogen Transformation Test) based on the calculation of the rate of nitrification on the basis of the concentration of nitrates in the soil after x days (without taking into account the value of the concentration of nitrates of the day 0) for a number of days. Rate of formation of nitrate:

102-d EC10 = 15.4 mg B / kg soil weight daily (sandy soil)

102-d EC50 > 17.5 mg B / kg soil weight daily (sandy soil and sandy loam)

102-d EC10 = 17.2 mg B / kg daily weight soil (sandy loam)

- Copper EDTA - CAS: 14025-15-1

Aquatic acute toxicity:

Species: Fish = 555 mg/l - Notes: OECD 203

Species: Daphnia = 109.2 mg/l - Notes: OECD 202

Species: Algae = 662.6 mg/l - Notes: OECD 201

Aquatic chronic toxicity:

Species: Fish = 37.2 mg/l - Notes: OECD 210

Species: Daphnia = 29.5 mg/l - Notes: OECD 211

Species: Algae = 43.7 mg/l - Notes: OECD 201

Bacteria toxicity:

Endpoint: NOEC = 654 mg/l - Duration h: 3 - Notes: OECD 209

12.2. Persistence and degradability

- Boric acid - CAS: 10043-35-3

Boron is naturally occurring and ubiquitous in the environment. Boric acid decomposes in the environment to natural borate

- Copper EDTA - CAS: 14025-15-1

Abiotic degradation: half-life 20 days

Resistant to hydrolysis (read across Ethylenediaminetetraacetic acid ferric sodium salt)

Biotic degradation:

The EDTA and its salts are not readily degradable; slightly alkaline pH improves the biodegradability of EDTA

12.3. Bioaccumulative potential

- Boric acid - CAS: 10043-35-3

Not significantly bio-accumulative.

- Copper EDTA - CAS: 14025-15-1

low bioaccumulation potential (log Kow <3)

12.4. Mobility in soil

The product is soluble and mobile in both terrestrial and aquatic compartments

12.5. Results of PBT and vPvB assessment

vPvB Substances: None - PBT Substances: None

12.6. Other adverse effects

None

VALAGRO SDS

Date: April 17, 2018 Rev.1.0

Product: Hidromix S

Code: 11717

Print Date: April 17, 2018

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Product :Recover if possible. In so doing, comply with the local and national regulations currently in force.

Packaging: Dispose according to regulations.

SECTION 14: Transport information

14.1. UN number

Not classified as dangerous in the meaning of transport regulations.

14.2. UN proper shipping name

N.A.

14.3. Transport hazard class(es)

N.A.

14.4. Packing Group

N.A.

14.5 Environmental hazards

IMDG-Marine pollutant: No

14.6. Special Precautions for User

N.A.

14.7. Transport in bulk according to Annex II of MARPOL and the IBC Code

N.A.

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 no substance on the REACH candidate list

Contains no REACH Annex XIV substances

15.1.2. National regulations

New Zealand

Classification : Classified as hazardous according to criteria in the HS (Minimum Degrees of Hazard) Regulations 2001.

National Chemical Inventories (NZIoC) : All components are listed on the New Zealand Inventory of Chemicals

HSNO Approval Number (Group Standard) : HSR002571. Fertiliser (Subsidiary Hazard) Group Standard 2006

15.2. Chemical safety assessment

No

SECTION 16: Other information

Text of phrases referred to under heading 3:

H360FD May damage fertility. May damage the unborn child.

H302 Harmful if swallowed.

H319 Causes serious eye irritation.

This document was prepared by a competent person who has received appropriate training.

Main bibliographic sources:

VALAGRO SDS

Date: April 17, 2018 Rev.1.0

Product: Hidromix S

Code: 11717

Print Date: April 17, 2018

ECDIN - Environmental Chemicals Data and Information Network - Joint Research Centre,
Commission of the European Communities

SAX's DANGEROUS PROPERTIES OF INDUSTRIAL MATERIALS - Eight Edition - Van
Nostrand Reinold

CCNL - Appendix 1

Insert further consulted bibliography

The information contained herein is based on our state of knowledge at the above-specified date. It refers solely to the product indicated and constitutes no guarantee of particular quality.

It is the duty of the user to ensure that this information is appropriate and complete with respect to the specific use intended.

Paragraphs modified from previous version: all paragraphs

This MSDS cancels and replaces any preceding release.

ADR: European Agreement concerning the International Carriage of
Dangerous Goods by Road.

CAS: Chemical Abstracts Service (division of the American Chemical
Society).

CLP: Classification, Labeling, Packaging.

DNEL: Derived No Effect Level.

EINECS: European Inventory of Existing Commercial Chemical Substances.

GefStoffVO: Ordinance on Hazardous Substances, Germany.

GHS: Globally Harmonized System of Classification and Labeling of
Chemicals.

IATA: International Air Transport Association.

IATA-DGR: Dangerous Goods Regulation by the "International Air Transport
Association" (IATA).

ICAO: International Civil Aviation Organization.

ICAO-TI: Technical Instructions by the "International Civil Aviation Organization"
(ICAO).

IMDG: International Maritime Code for Dangerous Goods.

INCI: International Nomenclature of Cosmetic Ingredients.

KSt: Explosion coefficient.

LC50: Lethal concentration, for 50 percent of test population.

LD50: Lethal dose, for 50 percent of test population.

LTE: Long-term exposure.

PNEC: Predicted No Effect Concentration.

RID: Regulation Concerning the International Transport of Dangerous Goods
by Rail.

STE: Short-term exposure.

STEL: Short Term Exposure limit.

STOT: Specific Target Organ Toxicity.

TLV: Threshold Limiting Value.

TWATLV: Threshold Limit Value for the Time Weighted Average 8 hour day.
(ACGIH Standard).

WGK: German Water Hazard Class.

N.A.: no data available