



according to Regulation (EC) No 1907/2006

257924 N-Serve ® Nitrification Inhibitor

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

1.1. Product identifier

257924 N-Serve ® Nitrification Inhibitor

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

Use of the substance/mixture

Reagent for analysis

1.3. Details of the supplier of the safety data sheet

Company name: HACH LANGE GmbH
Street: Willstätterstr. 11
Place: D-40549 Düsseldorf
Telephone: +49 (0)211 5288-383
e-mail: SDS@hach.com
Internet: www.de.hach.com
Responsible Department: HACH LANGE Ltd.

5, Pacific Way Salford Manchester M50 1DL - United Kingdom

Tel. +44 (0) 161 872 1487 * Fax +44 (0) 161 848 7324

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HACH LANGE Ltd.

Unit 1, Chestnut Road Western Industrial Estate

IRL-Dublin 12

Tel. +353 (0)1 4602522 e-Mail: info-ie@hach.com

1.4. Emergency telephone Poison Control Center Mainz: Tel: +49 (0) 6131 19240 - 24 hour emergency

number: service -

SECTION 2: Hazards identification

2.1. Classification of the substance or mixture

Regulation (EC) No. 1272/2008

Hazard categories:

Acute toxicity: Acute Tox. 3 Acute toxicity: Acute Tox. 4

Hazardous to the aquatic environment: Aquatic Chronic 2

Hazard Statements: Toxic in contact with skin. Harmful if swallowed.

Toxic to aquatic life with long lasting effects.

2.2. Label elements

Regulation (EC) No. 1272/2008

Hazard components for labelling

nitrapyrin (ISO); 2-chloro-6-trichloromethylpyridine

Signal word: Danger

Pictograms:







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Hazard statements

H302 Harmful if swallowed.
H311 Toxic in contact with skin.

H411 Toxic to aquatic life with long lasting effects.

Precautionary statements

P280 Wear protective gloves/protective clothing/eye protection/face protection.

P273 Avoid release to the environment.
P302+P352 IF ON SKIN: Wash with plenty of water.

P312 Call a POISON CENTER/doctor if you feel unwell.

P301+P312 IF SWALLOWED: Call a POISON CENTER/doctor if you feel unwell.

P330 Rinse mouth.
P391 Collect spillage.

Additional advice on labelling

The product is classified as dangerous in accordance with Regulation (EC) No. 1272/2008.

2.3. Other hazards

no data available

SECTION 3: Composition/information on ingredients

3.2. Mixtures

Hazardous components

| CAS No | Chemical name | | | Quantity |
|-----------|---|--------------|----------|----------|
| | EC No | Index No | REACH No | |
| | Classification according to Regulation (EC) No. 1272/2008 [CLP] | | | |
| 1929-82-4 | nitrapyrin (ISO); 2-chloro-6-trichloromethylpyridine | | | 90-100 % |
| | 217-682-2 | 006-057-00-8 | | |
| | Acute Tox. 4, Aquatic Chronic 2; H302 H411 other components | | | |
| | | | | 0-10 % |
| | | | | |
| | | | | |

Full text of H and EUH statements: see section 16.

SECTION 4: First aid measures

4.1. Description of first aid measures

General information

Take off contaminated clothing and shoes immediately.

Show this safety data sheet to the doctor in attendance.

The product itself does not burn.

First aider needs to protect himself.

After inhalation

Move to fresh air.

If symptoms persist, call a physician.

After contact with skin

Wash off immediately with plenty of water for at least 15 minutes.

Call a physician immediately.

Take off all contaminated clothing immediately.

After contact with eyes

In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.





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After ingestion

Drink 1 or 2 glasses of water.

Induce vomiting, but only if victim is fully conscious.

Call a physician immediately.

Never give anything by mouth to an unconscious person.

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

Cough, Shortness of breath, Spasm, headache

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

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

The product itself does not burn.

Water, Carbon dioxide (CO2), Alcohol-resistant foam Dry powder

Unsuitable extinguishing media

No Limit

5.2. Special hazards arising from the substance or mixture

Fire may liberate hazardous vapours.

Under fire conditions: Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen (NOx), dense black smoke.

5.3. Advice for firefighters

In order to avoid contact with skin, keep a safety distance and wear suitable protective clothing.

In the event of fire, wear self-contained breathing apparatus.

Additional information

Prevent fire extinguishing water from contaminating surface water or the ground water system.

SECTION 6: Accidental release measures

6.1. Personal precautions, protective equipment and emergency procedures

Use personal protective equipment. Only qualified personnel equipped with suitable protective equipment may intervene. Immediately evacuate personnel to safe areas.

Do not breathe vapours, mist or gas. Ensure adequate ventilation.

6.2. Environmental precautions

Should not be released into the environment.

6.3. Methods and material for containment and cleaning up

Contain spillage, soak up with non-combustible absorbent material, (e.g. sand, earth, diatomaceous earth, vermiculite) and transfer to a container for disposal according to local/national regulations (see section 13).

6.4. Reference to other sections

13. Disposal considerations

SECTION 7: Handling and storage

7.1. Precautions for safe handling

Advice on safe handling

Use only in well-ventilated areas.

Advice on protection against fire and explosion

None known.

See also section 5





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Further information on handling

Observe label precautions.

Avoid contact with skin, eyes and clothing.

7.2. Conditions for safe storage, including any incompatibilities

Requirements for storage rooms and vessels

Keep in a dry, cool place.

Hints on joint storage

None known.

7.3. Specific end use(s)

Laboratory chemicals

SECTION 8: Exposure controls/personal protection

8.1. Control parameters

Additional advice on limit values

None known.

8.2. Exposure controls

Appropriate engineering controls

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment.

Protective and hygiene measures

The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Wash hands before breaks and after work.

General industrial hygiene practice.

Eye/face protection

Safety glasses with side-shields

Chemical resistant goggles must be worn.

Hand protection

Gloves must be inspected prior to use. The selected protective gloves have to satisfy the specifications of EU Directive 89/686/EEC and the standard EN 374 derived from it.

Chemical resistant gloves made of butyl rubber or nitrile rubber category III according to EN 374.

If used in solution, or mixed with other substances, and under conditions which differ from EN 374, contact the supplier of the CE approved gloves.

Skin protection

Avoid contact with skin, eyes and clothing.

Respiratory protection

Ensure adequate ventilation, especially in confined areas.

Breathing apparatus only if aerosol or dust is formed.

Recommended Filter type: P2

Environmental exposure controls

Do not flush into surface water or sanitary sewer system.

SECTION 9: Physical and chemical properties

9.1. Information on basic physical and chemical properties

Physical state: solid, crystalline

Colour: white Odour: sweet

pH-Value: not applicable



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Changes in the physical state

Melting point: 62-63 °C
Initial boiling point and boiling range: no data available
Sublimation point: no data available
Softening point: no data available
Pour point: no data available
: no data available
: no data available
Flash point: > 93,3 °C
Sustaining combustion: No data available

Flammability

Solid: no data available
Gas: no data available

Explosive properties

no data available

Lower explosion limits:

Upper explosion limits:

Ignition temperature:

no data available

no data available

Auto-ignition temperature

Solid: no data available
Gas: no data available
Decomposition temperature: no data available

Oxidizing properties

no data available

Vapour pressure:

Vapour pressure:

no data available

no data available

Density:

no data available

Bulk density:

no data available

water solubility:

0,04 g/L

Solubility in other solvents

no data available

Partition coefficient: no data available Viscosity / dynamic: no data available Viscosity / kinematic: no data available Flow time: no data available Vapour density: no data available no data available Evaporation rate: Solvent separation test: no data available no data available Solvent content:

9.2. Other information

Solid content: no data available

no data available

SECTION 10: Stability and reactivity





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10.1. Reactivity

Reactivity Hazard: None known.

10.2. Chemical stability

Stable under recommended storage conditions.

10.3. Possibility of hazardous reactions

Reacts with the following substances: Aluminium, Magnesium

10.4. Conditions to avoid

Extremes of temperature and direct sunlight.

Decomposes on heating.

10.5. Incompatible materials

None known.

10.6. Hazardous decomposition products

Under fire conditions: Carbon dioxide (CO2), carbon monoxide (CO), oxides of nitrogen (NOx), dense black smoke.

SECTION 11: Toxicological information

11.1. Information on toxicological effects

Toxicocinetics, metabolism and distribution

No toxicology information is available.

Acute toxicity

Harmful if swallowed.

Toxic in contact with skin.

Harmful if swallowed.

Toxic in contact with skin.

ATEmix calculated

ATE (oral) 500,0 mg/kg; ATE (dermal) 850,0 mg/kg

| CAS No | Chemical name | | | | |
|-----------|--|-------------------|---------|--------|--------|
| | Exposure route | Dose | Species | Source | Method |
| 1929-82-4 | nitrapyrin (ISO); 2-chloro-6-trichloromethylpyridine | | | | |
| | oral | LD50 940 mg/kg | rat | | |
| | dermal | LD50 850 mg/kg | rabbit | | |

Irritation and corrosivity

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

No known effect.

Sensitising effects

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

No known effect.

Carcinogenic/mutagenic/toxic effects for reproduction

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

Contains no ingredient listed as a carcinogen

STOT-single exposure

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

The substance or mixture is not classified as specific target organ toxicant, single exposure.

STOT-repeated exposure

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

The substance or mixture is not classified as specific target organ toxicant, repeated exposure.





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Aspiration hazard

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

No aspiration toxicity classification

Specific effects in experiment on an animal

No toxicology information is available.

Additional information on tests

None known.

Further information

Other dangerous properties can not be excluded. Handle in accordance with good industrial hygiene and safety practice.

SECTION 12: Ecological information

12.1. Toxicity

No information on ecology is available.

| CAS No | Chemical name | | | | | | |
|-----------|--|------|----------|-----------|-------------------------------------|--------|--------|
| | Aquatic toxicity | Dose | | [h] [d] | Species | Source | Method |
| 1929-82-4 | nitrapyrin (ISO); 2-chloro-6-trichloromethylpyridine | | | | | | |
| | Acute fish toxicity | LC50 | 1,7 mg/l | | Oncorhynchus mykiss (rainbow trout) | GESTIS | |
| | Acute crustacea toxicity | EC50 | 4 mg/l | | Daphnia magna (Water flea) | GESTIS | |

12.2. Persistence and degradability

No data is available on the product itself.

12.3. Bioaccumulative potential

No data is available on the product itself.

12.4. Mobility in soil

no data available

12.5. Results of PBT and vPvB assessment

no data available

12.6. Other adverse effects

No known effect.

Further information

No known effect.

SECTION 13: Disposal considerations

13.1. Waste treatment methods

Advice on disposal

In accordance with local and national regulations.

Waste disposal number of waste from residues/unused products

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and

discarded chemicals; laboratory chemicals, consisting of or containing hazardous substances,

including mixtures of laboratory chemicals; hazardous waste

Waste disposal number of used product

160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and

discarded chemicals; laboratory chemicals, consisting of or containing hazardous substances,

including mixtures of laboratory chemicals; hazardous waste

Waste disposal number of contaminated packaging



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160506 WASTES NOT OTHERWISE SPECIFIED IN THE LIST; gases in pressure containers and

discarded chemicals; laboratory chemicals, consisting of or containing hazardous substances,

including mixtures of laboratory chemicals; hazardous waste

Contaminated packaging

Dispose of as unused product.

SECTION 14: Transport information

Land transport (ADR/RID)

Other applicable information (land transport)

Not subject to transport regulations.

Inland waterways transport (ADN)

Other applicable information (inland waterways transport)

Not tested

Marine transport (IMDG)

Other applicable information (marine transport)

Not subject to transport regulations.

Air transport (ICAO-TI/IATA-DGR)

Other applicable information (air transport)

Not subject to transport regulations.

14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: yes



Danger releasing substance: Nitrapyrin (ISO); 2-chloro-6-trichloromethylpyridine

14.6. Special precautions for user

Use personal protective equipment.

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

Not relevant

Other applicable information

Additional Information: This product may be shipped as part of a chemical kit composed of various compatible dangerous goods for analytical or testing purposes. This kit would have the following classification: Proper Shipping Name: Chemical Kit, Hazard Class: 9, UN Number 3316, Package group II, EMS Code: F-A, S-P

SECTION 15: Regulatory information

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

National regulatory information

15.2. Chemical safety assessment

Chemical safety assessments for substances in this mixture were not carried out.

SECTION 16: Other information

Changes

Revision: 21.08.2017

Safety datasheet sections which have been updated: 2, 3, 4, 10, 11

Revision: 15.08.2016

Safety datasheet sections which have been updated: 1-16





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Classification for mixtures and used evaluation method according to Regulation (EC) No. 1272/2008 [CLP]

| Classification | Classification procedure |
|-------------------------|--------------------------|
| Acute Tox. 3; H311 | Calculation method |
| Acute Tox. 4; H302 | Calculation method |
| Aquatic Chronic 2; H411 | Calculation method |

Relevant H and EUH statements (number and full text)

H302 Harmful if swallowed.H311 Toxic in contact with skin.

H411 Toxic to aquatic life with long lasting effects.

Further Information

The information is based on present level of our knowledge. It does not, however, give assurances of product properties and establishes no contract legal rights.

(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)