

Nickel-HR No.1 Photometer

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

1.1 - Product identifier

Trade name/designation Nickel-HR No.1 Photometer

Chemical name

Product-type Mixture

Product code TbsHNickHR1

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

Relevant identified uses - Reagent for water analysis

Uses advised against - Other

1.3 - Details of the supplier of the safety data sheet

Water-I.D. GmbH

Daimlerstr. 20

76344 Eggenstein Germany

Telephone : +49 (0) 721 - 78 20 29 - 0 Fax +49 (0) 721 - 78 20 29 - 11

Website www.water-id.com

EHS / Compliance: lab@water-id.com

1.4 - Emergency telephone number

- Poison Control Center Munich

Tel: +49 (0) 89 / 19 24 0

Germany

24 hour service

Languages: German, English

please also call from: United Kingdom

SECTION 2: Hazards identification

2.1 - Classification of the substance or mixture

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

| | |
|-------------------------|--|
| Acute Tox. 4 Dermal | Acute toxicity (dermal) - Category 4 |
| Acute Tox. 4 Inhalation | Acute toxicity (inhalative) - Category 4 |
| Repr. 1B | Reproductive toxicity - Category 1B |
| Aquatic Chronic 3 | Hazardous to the aquatic environment - Aquatic Chronic 3 |

2.2 - Label elements

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

Contains: boric acid (CAS No.: 10043-35-3)

Signal word : Danger

Hazard pictograms



Hazard statements

| | |
|------|------------------------------|
| H312 | Harmful in contact with skin |
|------|------------------------------|

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| | |
|------|---|
| H332 | Harmful if inhaled |
| H360 | May damage fertility or the unborn child |
| H412 | Harmful to aquatic life with long lasting effects |

Precautionary statements

| | |
|-----------|--|
| P201 | Obtain special instructions before use. |
| P202 | Do not handle until all safety precautions have been read and understood. |
| P261 | Avoid breathing dust. |
| P271 | Use only outdoors or in a well-ventilated area. |
| P273 | Avoid release to the environment. |
| P280 | Wear protective gloves, protective clothing, eye protection. |
| P302+P352 | IF ON SKIN: Wash with plenty of water and soap. |
| P304+P340 | IF INHALED: Remove person to fresh air and keep comfortable for breathing. |
| P308+P313 | IF exposed or concerned: Get medical advice/attention. |
| P312 | Call a POISON CENTER, a doctor if you feel unwell. |
| P362+P364 | Take off contaminated clothing and wash it before reuse. |
| P405 | Store locked up. |
| P501 | Dispose of contents, container to an appropriate recycling or disposal facility. |

EUH-phrases : None

2.3 - Other hazards

PBT-substance. - No information available.

vPvB-substance. - No information available.

Other hazards which do not result in classification - No information available.

SECTION 3: Composition / information on ingredients

3.1 - Substances

Not applicable

3.2 - Mixtures

- This mixture contains the following substances of very high concern (SVHC) which are included in the Candidate List according to Article 59 of REACH:

- Boric Acid

| Chemical name | No | % | Class | Spec. concentrations |
|---|--|---------|---|----------------------------------|
| boric acid | CAS No. : 10043-35-3 Index No. : 005-007-00-2 EC No. : 233-139-2 | 60 - 80 | Repr. 1B - H360 | Repr. 1B - H360 : 5,5>=%<=100 |
| sodium dithionite, sodium hydrosulphite | CAS No. : 7775-14-6 Index No. : 016-028-00-1 EC No. : 231-890-0 | 1 - 5 | Acute Tox. 4 Oral - H302 Aquatic Chronic 2 - H411 Self-heat. 1 - H251 | Not applicable |

SECTION 4: First aid measures

4.1 - Description of first aid measures

Following inhalation

- Provide fresh air.
- After inhaling vapours, first symptoms of poisoning may develop hours later, so always consult a doctor.

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- When in doubt or if symptoms are observed, get medical advice.
- Medical examination necessary even merely on suspicion of intoxication.
- Symptoms may develop several hours following exposure; medical observation therefore necessary for at least 48 hours.

Following skin contact

- After contact with skin, wash immediately with plenty of water and soap.
- Remove contaminated, saturated clothing immediately.
- In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).
- Medical examination necessary even merely on suspicion of intoxication.

After eye contact

- Rinse immediately carefully and thoroughly with eye-bath or water.

After ingestion

- Rinse mouth thoroughly with water.
- Do NOT induce vomiting.

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

Symptoms and effects - Following inhalation - No information available.

Symptoms and effects - Following skin contact - No information available.

Symptoms and effects - After eye contact - No information available.

Symptoms and effects - After ingestion - No information available.

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

- Treat symptomatically. Antidotal dispensation.

SECTION 5: Firefighting measures

5.1 - Extinguishing media

Suitable extinguishing media

- ABC-powder
- Carbon dioxide (CO₂)
- Foam
- Extinguishing powder

Unsuitable extinguishing media

- Full water jet

5.2 - Special hazards arising from the substance or mixture

Special hazards arising from the substance or mixture

- Hazardous combustion products

Hazardous decomposition products

- Phosphorus oxides
- Sulphur oxides
- Pyrolysis products, toxic

5.3 - Advice for firefighters

- Remove product from area of fire.

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- Wear a self-contained breathing apparatus and chemical protective clothing.

SECTION 6: Accidental release measures

6.1 - Personal precautions, protective equipment and emergency procedures

For non-emergency personnel

- Use personal protection equipment.
- Remove persons to safety.
- Wear breathing apparatus if exposed to vapours/dusts/aerosols.

For emergency responders

- Wear personal protection equipment (refer to section 8).
- Wear breathing apparatus if exposed to vapours/dusts/aerosols.

6.2 - Environmental precautions

- Do not allow to enter into surface water or drains.

6.3 - Methods and material for containment and cleaning up

Methods and material for containment

- Soak up inert absorbent and dispose as waste requiring special attention.

Methods and material for cleaning up

- Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents).
- Clear contaminated areas thoroughly.
- Take up carefully when dry.
- Take up dust-free and set down dust-free.
- Ventilate affected area.
- Take up mechanically, placing in appropriate containers for disposal.

Inappropriate techniques

- No information available.

6.4 - Reference to other sections

- Disposal: see section 13
- Safe handling: see section 7
- Personal protection equipment: see section 8

SECTION 7: Handling and storage

7.1 - Precautions for safe handling

Recommendation

- All work processes must always be designed so that the following is excluded: Skin contact
- All work processes must always be designed so that the following is excluded: Generation/formation of dust
- Avoid exposure - obtain special instructions before use.
- Vapours/aerosols must be exhausted directly at the point of origin.
- All work processes must always be designed so that the following is excluded: Inhalation
- See section 8.

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Advices on general occupational hygiene

- Immediately remove any contaminated clothing, shoes or stockings.
- Avoid contact with skin, eyes and clothes.
- Wash contaminated clothing prior to re-use.
- Thorough skin-cleansing after handling the product.
- Wash hands before breaks and after work.
- When using do not eat, drink, smoke, sniff.
- Work in well-ventilated zones or use proper respiratory protection.

7.2 - Conditions for safe storage, including any incompatibilities

- Storage class Non-combustible substances of acute toxicity, category 3 / hazardous substances that are toxic or produce chronic effects (solid)
- Storage class Non-combustible substances of acute toxicity, category 3 / hazardous substances that are toxic or produce chronic effects

7.3 - Specific end use(s)

- Reagent for water analysis

SECTION 8: Exposure controls/personal protection

8.1 - Control parameters

8.2 - Exposure controls

Appropriate engineering controls

- No information available.

Individual protection measures, such as personal protective equipment

- Suitable eye protection: Eye glasses with side protection



- Suitable protective clothing: lab coat



- Suitable respiratory protection apparatus: Particle filter device (DIN EN 143)



- The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product. If the concentration is exceeded, self-contained breathing apparatus must be used.

- When handling with chemical substances, protective gloves must be worn with the CE-label including the four control digits.



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- Suitable material: NBR (Nitrile rubber)

SECTION 9: Physical and chemical properties

9.1 - Information on basic physical and chemical properties

| <u>Physical state</u> | Solid | <u>Appearance</u> | Tablets |
|-------------------------------|-------|-------------------|-----------|
| <u>Colour</u> | White | <u>Odour</u> | odourless |
| Odour threshold | | No data available | |
| pH | | 6,2 10,5 g/l | |
| Melting point | | No data available | |
| Freezing point | | No data available | |
| Boiling point | | No data available | |
| Flash point | | No data available | |
| Evaporation rate | | No data available | |
| flammability | | No data available | |
| Lower explosion limit | | No data available | |
| Upper explosion limit | | No data available | |
| Vapour pressure | | No data available | |
| Vapour density | | No data available | |
| Relative density | | No data available | |
| Density | | No data available | |
| Solubility (Water) | | very soluble | |
| Solubility (Ethanol) | | No data available | |
| Solubility (Acetone) | | No data available | |
| Solubility (Organic solvents) | | No data available | |
| Log KOC | | No data available | |
| Auto-ignition temperature | | No data available | |
| Decomposition temperature | | No data available | |
| Kinematic viscosity | | No data available | |
| Dynamic viscosity | | No data available | |

9.2 - Other information

| | |
|-------------------------|-------------------|
| VOC content | No data available |
| Minimum ignition energy | No data available |
| Conductivity | No data available |

SECTION 10: Stability and reactivity

10.1 - Reactivity

- This material is considered to be non-reactive under normal use conditions.

10.2 - Chemical stability

- The product is chemically stable under recommended conditions of storage, use and temperature.

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10.3 - Possibility of hazardous reactions

- No hazardous reaction when handled and stored according to provisions.

10.4 - Conditions to avoid

- No information available.

10.5 - Incompatible materials

- No information available.

10.6 - Hazardous decomposition products

- Does not decompose when used for intended uses.

SECTION 11: Toxicological information

11.1 - Information on toxicological effects

Acute toxicity - Acute toxicity (dermal) - Category 4 - Harmful in contact with skin
- Acute toxicity (inhalative) - Category 4 - Harmful if inhaled

Toxicity : Mixture

| | |
|---------------------------------------|-------------------|
| LD50 oral (rat) | No data available |
| LD50 dermal (rat) | No data available |
| LD50 dermal (rabbit) | No data available |
| LC50 inhalation (rat) | No data available |
| LC50 inhalation dusts and mists (rat) | No data available |
| LC50 inhalation vapours (rat) | No data available |

- No information available.
- Harmful by inhalation.
- Toxic by inhalation.

Toxicity : Substances

| boric acid (10043-35-3) | |
|---------------------------------------|-----------------------------|
| LD50 oral (rat) | 2600 mg/kg < V < 4080 mg/kg |
| LD50 dermal (rabbit) | 2000 mg/kg |
| LC50 inhalation dusts and mists (rat) | 2,12 mg/l 4h |

Skin corrosion/irritation - Not classified

Serious eye damage/eye irritation - Not classified

Respiratory or skin sensitisation - Not classified

Germ cell mutagenicity - Not classified

Carcinogenicity - Not classified

Reproductive toxicity - Reproductive toxicity - Category 1B - May damage fertility or the unborn child

STOT-single exposure - Not classified

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STOT-repeated exposure - Not classified

Aspiration hazard - Not classified

SECTION 12: Ecological information

12.1 - Toxicity

Toxicity : Mixture

| | |
|-----------------------------------|-------------------|
| EC50 48 hr crustacea | No data available |
| LC50 96 hr fish | No data available |
| ErC50 algae | No data available |
| ErC50 other aquatic plants | No data available |
| NOEC chronic fish | No data available |
| NOEC chronic crustacea | No data available |
| NOEC chronic algae | No data available |
| NOEC chronic other aquatic plants | No data available |

Toxicity : Substances

| | |
|--|--|
| boric acid (10043-35-3) | |
| EC50 48 hr crustacea | 91 mg/l < V < 165 mg/l |
| LC50 96 hr fish | 74 mg/l < V < 79,7 mg/l |
| NOEC chronic fish | 11,2 mg/l < V < 44,5 mg/l |
| NOEC chronic crustacea | 16,6 mg/l < V < 43,3 mg/l |
| NOEC chronic other aquatic plants | 3,6 mg/l < V < 19,5 mg/l |
| sodium dithionite, sodium hydrosulphite (7775-14-6) | |
| EC50 48 hr crustacea | 10 mg/l < V < 100 mg/l Daphnia magna |
| LC50 96 hr fish | 10 mg/l < V < 100 mg/l Leuciscus idus |

- Harmful to aquatic life with long lasting effects.

12.2 - Persistence and degradability

| | |
|---------------------------------|-------------------|
| Biochemical oxygen demand (BOD) | No data available |
| Chemical oxygen demand (COD) | No data available |
| % of biodegradation in 28 days | No data available |

- No information available.

12.3 - Bioaccumulative potential

| | |
|-------------------------------|-------------------|
| Bioconcentration factor (BCF) | No data available |
| Log KOC | No data available |

- No indication of bioaccumulation potential.

12.4 - Mobility in soil

- No information available.

12.5 - Results of PBT and vPvB assessment

- No information available.

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- No information available.

12.6 - Other adverse effects

- No information available.

SECTION 13: Disposal considerations

13.1 - Waste treatment methods

Waste treatment methods

- Waste disposal according to directive 2008/98/EC, covering waste and dangerous waste.
- Handle contaminated packages in the same way as the substance itself.

Sewage disposal

- Do not empty into drains.

Special precautions for waste treatment

- Waste requires special monitoring.
- Collect the waste separately.
- Send to a hazardous waste incinerator facility under observation of official regulations.
- Waste requires monitoring.
- The waste is to be kept separate from other types of waste until its disposal.

Community or national or regional provisions

- Dispose according to legislation.

SECTION 14: Transport information

14.1 - UN number

Not applicable

14.2 - UN proper shipping name

14.3 - Transport hazard class(es)

14.4 - Packing group

14.5 - Environmental hazards

Additional information

- No dangerous good in sense of these transport regulations.

14.6 - Special precautions for user

14.7 - Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code

SECTION 15: Regulatory information

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

Substances REACH candidates

boric acid (Index No.: 005-007-00-2 - EC No.: 233-139-2 - CAS No.: 10043-35-3)

Substances Annex XIV

None

Substances Annex XVII

None

VOC content

No data available

15.2 - Chemical Safety Assessment

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Chemical safety assessment carried out for the product - No information available.

SECTION 16: Other information

SDS versions

| Version | Issue date | Description of the amendments |
|---------|------------|-------------------------------|
| 1 | 09.01.2019 | MSDS creation |

Abbreviations and acronyms - See overview table at www.euphrac.eu

Texts of the regulatory sentences

| | |
|-------------------------|--|
| Acute Tox. 4 Dermal | Acute toxicity (dermal) - Category 4 |
| Acute Tox. 4 Inhalation | Acute toxicity (inhalative) - Category 4 |
| Acute Tox. 4 Oral | Acute toxicity (oral) - Category 4 |
| Aquatic Chronic 2 | Hazardous to the aquatic environment - Aquatic Chronic 2 |
| Aquatic Chronic 3 | Hazardous to the aquatic environment - Aquatic Chronic 3 |
| H251 | Self-heating: may catch fire |
| H302 | Harmful if swallowed |
| H312 | Harmful in contact with skin |
| H332 | Harmful if inhaled |
| H360 | May damage fertility or the unborn child |
| H360FD(U) | May damage fertility. May damage the unborn child |
| H411 | Toxic to aquatic life with long lasting effects |
| H412 | Harmful to aquatic life with long lasting effects |
| Repr. 1B | Reproductive toxicity - Category 1B |
| Self-heat. 1 | self-heating substances and mixtures - Category 1 |

The above information describes exclusively the safety requirements of the product and is based on our present-day knowledge. The information is intended to give you advice about the safe handling of the product named in this safety data sheet, for storage, processing, transport and disposal. The information cannot be transferred to other products. In the case of mixing the product with other products or in the case of processing, the information on this safety data sheet is not necessarily valid for the new made-up material.

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