

Printing date 13.05.2019 Version number 4 Revision: 10.04.2018

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

· 1.1 Product identifier

• Trade name: Rhodinette Nickelbad; Nickelbad WN 1 gebrauchsfertig
Rhodinette nickel bath; Nickel bath WN 1 (ready to use)

- · Article number: 3010400402, 3050400202
- · 1.2 Relevant identified uses of the substance or mixture and uses advised against

No further relevant information available.

- · Application of the substance / the mixture Galvanic bath
- · 1.3 Details of the supplier of the safety data sheet
- · Manufacturer/Supplier:

Wieland Edelmetalle GmbH

Schwenninger Str. 13

75179 Pforzheim

Telefon +49 (07231)-1393-0, Telefax +49 (07231)-1393-100

· Further information obtainable from:

Wieland Edelmetalle GmbH

www.wieland-edelmetalle.de

msds@wieland-edelmetalle.de

· 1.4 Emergency telephone number:

Emergency CONTACT (24-Hour-Number):GBK GmbH +49 (0)6132-84463

SECTION 2: Hazards identification

- · 2.1 Classification of the substance or mixture
- · Classification according to Regulation (EC) No 1272/2008



GHS08 health hazard

Resp. Sens. 1 H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

Muta. 2
Carc. 1A
Repr. 1B
H341
Suspected of causing genetic defects.
May cause cancer by inhalation.
H360D
May damage the unborn child.

STOT RE 1 H372 Causes damage to organs through prolonged or repeated exposure.



GHS09 environment

Aquatic Chronic 2 H411 Toxic to aquatic life with long lasting effects.



GHS07

Acute Tox. 4 H302 Harmful if swallowed.

Skin Sens. 1 H317 May cause an allergic skin reaction.

- · 2.2 Label elements
- · Labelling according to Regulation (EC) No 1272/2008

The product is classified and labelled according to the CLP regulation.

· Hazard pictograms







CHSOT

CHCUS

CHSUG

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· Signal word Danger

· Hazard-determining components of labelling:

nickel dichloride

nickel sulphate

· Hazard statements

H302 Harmful if swallowed.

H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.

H317 May cause an allergic skin reaction.

H341 Suspected of causing genetic defects.

H350i May cause cancer by inhalation.

H360D May damage the unborn child.

H372 Causes damage to organs through prolonged or repeated exposure.

H411 Toxic to aquatic life with long lasting effects.

· Precautionary statements

P261 Avoid breathing mist/vapours/spray.

P280 Wear protective gloves / face protection.

P285 In case of inadequate ventilation wear respiratory protection.

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

P405 Store locked up.

P501 Dispose of contents/container in accordance with local/regional/national/international regulations.

- · 2.3 Other hazards
- · Results of PBT and vPvB assessment
- · **PBT:** Not applicable.
- · vPvB: Not applicable.

SECTION 3: Composition/information on ingredients

- · 3.2 Chemical characterisation: Mixtures
- · Description: Mixture of substances listed below with nonhazardous additions.

| · Dangerous components: | | |
|-------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------|
| CAS: 7718-54-9 | nickel dichloride | 10-<20% |
| | Acute Tox. 3, H301; Acute Tox. 3, H331; Resp. Sens. 1, H334; Muta. 2, H341; Carc. 1A, H350i; Repr. 1B, H360D; STOT RE 1, H372; Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Skin Irrit. 2, H315; Skin Sens. 1, H317 | |
| CAS: 7786-81-4 | nickel sulphate | 5-<10% |
| | Resp. Sens. 1, H334; Muta. 2, H341; Carc. 1A, H350i; Repr. 1B, H360D; STOT RE 1, H372; Aquatic Acute 1, H400; Aquatic Chronic 1, H410; Acute Tox. 4, H302; Acute Tox. 4, H332; Skin Irrit. 2, H315; Skin Sens. 1, H317 | |
| CAS: 10043-35-3 | boric acid | 1-<3% |
| EINECS: 233-139-2 | ♦ Repr. 1B, H360FD | |
| · SVHC | | |
| 10043-35-3 boric acid | | |

SECTION 4: First aid measures

- · 4.1 Description of first aid measures
- · General information: Immediately remove any clothing soiled by the product.

· Additional information: For the wording of the listed hazard phrases refer to section 16.

· After inhalation: Supply fresh air; consult doctor in case of complaints.

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· After skin contact:

Immediately wash with water and soap and rinse thoroughly.

If skin irritation continues, consult a doctor.

· After eye contact:

Rinse opened eye for several minutes under running water. If symptoms persist, consult a doctor.

· After swallowing:

Rinse out mouth and then drink plenty of water.

Do not induce vomiting; call for medical help immediately.

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

No further relevant information available.

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

No further relevant information available.

SECTION 5: Firefighting measures

- · 5.1 Extinguishing media
- · Suitable extinguishing agents: Use fire extinguishing methods suitable to surrounding conditions.
- · 5.2 Special hazards arising from the substance or mixture

Under certain fire conditions, traces of other toxic gases cannot be excluded, e.g.:

- · 5.3 Advice for firefighters
- **Protective equipment:** Wear self-contained respiratory protective device.

SECTION 6: Accidental release measures

· 6.1 Personal precautions, protective equipment and emergency procedures

Wear protective equipment. Keep unprotected persons away.

· 6.2 Environmental precautions:

Inform respective authorities in case of seepage into water course or sewage system.

Do not allow to enter sewers/ surface or ground water.

· 6.3 Methods and material for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

Dispose contaminated material as waste according to item 13.

Ensure adequate ventilation.

· 6.4 Reference to other sections

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

SECTION 7: Handling and storage

· 7.1 Precautions for safe handling

Ensure good ventilation/exhaustion at the workplace.

Open and handle receptacle with care.

Prevent formation of aerosols.

- Information about fire and explosion protection: Keep respiratory protective device available.
- · 7.2 Conditions for safe storage, including any incompatibilities
- · Storage:
- Requirements to be met by storerooms and receptacles: Store only in the original receptacle.
- · Information about storage in one common storage facility: Not required.
- · Further information about storage conditions:

Store under lock and key and with access restricted to technical experts or their assistants only.

· Storage class: 6.1 D

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· 7.3 Specific end use(s) No further relevant information available.

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SECTION 8: Exposure controls/personal protection

- · Additional information about design of technical facilities: No further data; see item 7.
- · 8.1 Control parameters

· Ingredients with limit values that require monitoring at the workplace:

7718-54-9 nickel dichloride

WEL Long-term value: 0.1 mg/m³ as Ni; Sk; Carc; Sen

7786-81-4 nickel sulphate

WEL Long-term value: 0.1 mg/m³ as Ni; Sk; Carc; Sen

- · Additional information: The lists valid during the making were used as basis.
- · 8.2 Exposure controls
- · Personal protective equipment:
- · General protective and hygienic measures:

Keep away from foodstuffs, beverages and feed.

Immediately remove all soiled and contaminated clothing

Wash hands before breaks and at the end of work.

Store protective clothing separately.

- Respiratory protection: Use suitable respiratory protective device in case of insufficient ventilation.
- · Protection of hands:



Protective gloves

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

· Material of gloves

Butyl rubber, BR

Fluorocarbon rubber (Viton)

Nitrile rubber, NBR

Chloroprene rubber, CR

· Penetration time of glove material

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

· Not suitable are gloves made of the following materials:

Strong material gloves

Leather gloves

· Eye protection:



Tightly sealed goggles

· Body protection: Protective work clothing

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| SECTION |)N 9: Physica | d and cher | nical propei | ties |
|---------|---------------|------------|--------------|------|
| | | | | |

- · 9.1 Information on basic physical and chemical properties
- · General Information

· Appearance:

Form: Fluid Colour: Green

· **Odour:** Product specific

· pH-value at 20 °C:

· Change in condition

Melting point/freezing point: Undetermined. **Initial boiling point and boiling range:** Undetermined.

· Flash point: Not applicable.

• **Auto-ignition temperature:** Product is not selfigniting.

• **Explosive properties:** Product does not present an explosion hazard.

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· Explosion limits:

Oxidising properties None

· Density at 20 °C: ca. 1.1 g/cm³

· Solubility in / Miscibility with

water: Fully miscible.

• **9.2 Other information** No further relevant information available.

SECTION 10: Stability and reactivity

- \cdot 10.1 Reactivity No further relevant information available.
- · 10.2 Chemical stability
- Thermal decomposition / conditions to be avoided: No decomposition if used according to specifications.
- · 10.3 Possibility of hazardous reactions No dangerous reactions known.
- 10.4 Conditions to avoid No further relevant information available.
- 10.5 Incompatible materials: No further relevant information available.
- · 10.6 Hazardous decomposition products: No dangerous decomposition products known.

SECTION 11: Toxicological information

- · 11.1 Information on toxicological effects
- · Acute toxicity

Harmful if swallowed.

| · LD/LC50 v | values | relevant f | or cl | assification: |
|-------------|--------|------------|-------|---------------|
|-------------|--------|------------|-------|---------------|

ATE (Acute Toxicity Estimates)

Oral LD50 741-1,951 mg/kg (rat)
Inhalative LC50/4 h 23.1 mg/l

7718-54-9 nickel dichloride

Oral LD50 105-681 mg/kg (rat) Inhalative LC50/4 h 3 mg/l (ATE)

7786-81-4 nickel sulphate

| | | - |
|------------|----------|-----------------|
| Oral | LD50 | 264 mg/kg (rat) |
| Inhalative | LC50/4 h | 11 mg/l (ATE) |

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· Primary irritant effect:

- · Skin corrosion/irritation Based on available data, the classification criteria are not met.
- · Serious eye damage/irritation Based on available data, the classification criteria are not met.
- · Respiratory or skin sensitisation

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

May cause an allergic skin reaction.

- · CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)
- · Germ cell mutagenicity

Suspected of causing genetic defects.

· Carcinogenicity

May cause cancer by inhalation.

· Reproductive toxicity

May damage the unborn child.

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

Causes damage to organs through prolonged or repeated exposure.

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

SECTION 12: Ecological information

- · 12.1 Toxicity
- · Aquatic toxicity: No further relevant information available.
- 12.2 Persistence and degradability No further relevant information available.
- 12.3 Bioaccumulative potential No further relevant information available.
- 12.4 Mobility in soil No further relevant information available.
- · Ecotoxical effects:
- · Remark: Toxic for fish
- · Additional ecological information:
- · General notes:

Toxic for aquatic organisms

Water danger class 3 (German Regulation) (Self-assessment): extremely hazardous for water

Do not allow product to reach ground water, water course or sewage system, even in small quantities.

Danger to drinking water if even extremely small quantities leak into the ground.

- · 12.5 Results of PBT and vPvB assessment
- · **PBT**: Not applicable.
- · vPvB: Not applicable.
- · 12.6 Other adverse effects No further relevant information available.

SECTION 13: Disposal considerations

- · 13.1 Waste treatment methods
- · Recommendation

Must be specially treated adhering to official regulations.

Must not be disposed together with household garbage. Do not allow product to reach sewage system.

- · Uncleaned packaging:
- · Recommendation:

Packagings that may not be cleansed are to be disposed of in the same manner as the product.

Packaging may be reused or recycled after cleaning.

· Recommended cleansing agents: Water, if necessary together with cleansing agents.

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| SECTION 14: Transport informa | tion |
|--------------------------------------------|---------------------------------------------------------------------|
| · 14.1 UN-Number | |
| · ADR, IMDG, IATA | UN3082 |
| · 14.2 UN proper shipping name | |
| ADR | 3082 ENVIRONMENTALLY HAZARDOU |
| | SUBSTANCE, LIQUID, N.O.S. (nickel sulphate, nick |
| 7.50 | dichloride) |
| IMDG | ENVIRONMENTALLY HAZARDOUS SUBSTANC |
| | LIQUID, N.O.S. (nickel sulphate, nickel dichloride MARINE POLLUTANT |
| IATA | ENVIRONMENTALLY HAZARDOUS SUBSTANC |
| | LIQUID, N.O.S. (nickel sulphate, nickel dichloride) |
| 14.3 Transport hazard class(es) | |
| ADR | |
| | |
| Class | 9 (M6) Miscellaneous dangerous substances and articles |
| Label | 9 |
| IMDG, IATA | |
| Class | 9 Miscellaneous dangerous substances and articles. |
| Label | 9 |
| 14.4 Packing group | |
| ADR, IMDG, IATA | III |
| 14.5 Environmental hazards: | Product contains environmentally hazardous substance |
| Manda and Badanda | nickel sulphate |
| Marine pollutant: | Yes Symbol (fish and tree) |
| Special marking (ADR): | Symbol (fish and tree) |
| Special marking (IATA): | Symbol (fish and tree) |
| 14.6 Special precautions for user | Warning: Miscellaneous dangerous substances a |
| | articles. |
| Danger code (Kemler): | 90 E A S E |
| EMS Number: | F-A,S-F |
| 14.7 Transport in bulk according to Ann | |
| Marpol and the IBC Code | Not applicable. |
| Transport/Additional information: | |
| ADR | 57 |
| Limited quantities (LQ) | 5L |
| Transport category Tunnel restriction code | 3 E |
| Turner resurction code | L |

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• UN "Model Regulation":

UN 3082, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, LIQUID, N.O.S. (nickel sulphate, nickel dichloride), 9, III

SECTION 15: Regulatory information

- · 15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture
- · Directive 2012/18/EU
- · Named dangerous substances ANNEX I None of the ingredients is listed.
- · Seveso category E2 Hazardous to the Aquatic Environment
- · Qualifying quantity (tonnes) for the application of lower-tier requirements 200 t
- · Qualifying quantity (tonnes) for the application of upper-tier requirements 500 t
- REGULATION (EC) No 1907/2006 ANNEX XVII Conditions of restriction: 3, 27, 28, 30
- · National regulations:
- · Technical instructions (air):

| Class | Share in % |
|-------|------------|
| II | 19.9 |

- · Waterhazard class: Water danger class 3 (Self-assessment): extremely hazardous for water.
- · Other regulations, limitations and prohibitive regulations
- · Substances of very high concern (SVHC) according to REACH, Article 57

10043-35-3 boric acid

· 15.2 Chemical safety assessment: A Chemical Safety Assessment has not been carried out.

SECTION 16: Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

· Relevant phrases

- H301 Toxic if swallowed.
- H302 Harmful if swallowed.
- H315 Causes skin irritation.
- H317 May cause an allergic skin reaction.
- H331 Toxic if inhaled.
- H332 Harmful if inhaled.
- H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
- H341 Suspected of causing genetic defects.
- H350i May cause cancer by inhalation.
- H360D May damage the unborn child.
- H360FD May damage fertility. May damage the unborn child.
- H372 Causes damage to organs through prolonged or repeated exposure.
- H400 Very toxic to aquatic life.
- H410 Very toxic to aquatic life with long lasting effects.

· Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer (Regulations Concerning the International Transport of Dangerous Goods by Rail)

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

ICAO: International Civil Aviation Organisation

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

ADR: Accord européen sur le transport des marchandises dangereuses par Route (European Agreement concerning the International Carriage of Dangerous Goods by Road)

IMDG: International Maritime Code for Dangerous Goods

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IATA: International Air Transport Association

GHS: Globally Harmonised System of Classification and Labelling of Chemicals EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

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

LC50: Lethal concentration, 50 percent

LD50: Lethal dose, 50 percent

PBT: Persistent, Bioaccumulative and Toxic SVHC: Substances of Very High Concern

vPvB: very Persistent and very Bioaccumulative

Acute Tox. 3: Acute toxicity - Category 3

Acute Tox. 4: Acute toxicity - Category 4 Skin Irrit. 2: Skin corrosion/irritation - Category 2

Resp. Sens. 1: Respiratory sensitisation - Category 1

Skin Sens. 1: Skin sensitisation – Category 1

Muta. 2: Germ cell mutagenicity - Category 2

Carc. 1A: Carcinogenicity - Category 1Ai

Repr. 1B: Reproductive toxicity – Category 1B Repr. 1B: Reproductive toxicity – Category 1B

STOT RE 1: Specific target organ toxicity (repeated exposure) - Category 1

Aquatic Acute 1: Hazardous to the aquatic environment - acute aquatic hazard - Category 1 Aquatic Chronic 1: Hazardous to the aquatic environment - long-term aquatic hazard - Category 1

Aquatic Chronic 2: Hazardous to the aquatic environment - long-term aquatic hazard - Category 2

* * Data compared to the previous version altered.