

## Safety data sheet according to 1907/2006/EC, Article 31

Printing date 19.10.2018

Version number 2

Revision: 19.10.2018

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

- **1.1 Product identifier**
- **Trade name:** Nickelbad WN 1 Ansatzsalz  
Nickel bath WN 1 (make-up salt)
- **Article number:** 3050400203
- **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	H341	Suspected of causing genetic defects.
Carc. 1A	H350i	May cause cancer by inhalation.
Repr. 1B	H360FD	May damage fertility. May damage the unborn child.
STOT RE 1	H372	Causes damage to organs through prolonged or repeated exposure.



GHS09 environment

Aquatic Acute 1	H400	Very toxic to aquatic life.
Aquatic Chronic 1	H410	Very toxic to aquatic life with long lasting effects.



GHS07

Acute Tox. 4	H302	Harmful if swallowed.
Acute Tox. 4	H332	Harmful if inhaled.
Skin Irrit. 2	H315	Causes skin irritation.
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.

(Contd. on page 2)

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**Nickel bath WN 1 (make-up salt)**

(Contd. of page 1)

## Hazard pictograms



GHS07 GHS08 GHS09

## Signal word Danger

## Hazard-determining components of labelling:

nickel sulphate  
 nickel dichloride  
 boric acid

## Hazard statements

H302+H332 Harmful if swallowed or if inhaled.  
 H315 Causes skin irritation.  
 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.  
 H360FD May damage fertility. May damage the unborn child.  
 H372 Causes damage to organs through prolonged or repeated exposure.  
 H410 Very toxic to aquatic life with long lasting effects.

## Precautionary statements

P260 Do not breathe dust/fume/gas/mist/vapours/spray.  
 P280 Wear protective gloves/protective clothing/eye protection/face protection.  
 P284 [In case of inadequate ventilation] wear respiratory protection.  
 P342+P311 If experiencing respiratory symptoms: Call a POISON CENTER/doctor.  
 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: 7786-81-4 EINECS: 232-104-9	nickel sulphate ⚠ Resp. Sens. 1, H334; Muta. 2, H341; Carc. 1A, H350i; Repr. 1B, H360D; STOT RE 1, H372; ⚠ Aquatic Acute 1, H400 (M=1); Aquatic Chronic 1, H410 (M=1); ⚠ Acute Tox. 4, H302; Acute Tox. 4, H332; Skin Irrit. 2, H315; Skin Sens. 1, H317	25-50%
CAS: 10043-35-3 EINECS: 233-139-2	boric acid ⚠ Repr. 1B, H360FD	10-25%
CAS: 7718-54-9 EINECS: 231-743-0	nickel dichloride ⚠ 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 (M=1); Aquatic Chronic 1, H410 (M=1); ⚠ Skin Irrit. 2, H315; Skin Sens. 1, H317	5-10%

### SVHC

10043-35-3	boric acid
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(Contd. on page 3)

## Safety data sheet according to 1907/2006/EC, Article 31

Printing date 19.10.2018

Version number 2

Revision: 19.10.2018

**Trade name: Nickelbad WN 1 Ansatzsalz**  
**Nickel bath WN 1 (make-up salt)**

(Contd. of page 2)

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

### SECTION 4: First aid measures

#### · 4.1 Description of first aid measures

##### · General information:

Immediately remove any clothing soiled by the product.

Symptoms of poisoning may even occur after several hours; therefore medical observation for at least 48 hours after the accident.

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

##### · 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:** Seek immediate medical advice.

#### · 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.:

In case of fire, the following can be released:

Sulphur dioxide (SO<sub>2</sub>)

#### · 5.3 Advice for firefighters

· **Protective equipment:** Mount respiratory protective device.

##### · Additional information

Collect contaminated fire fighting water separately. It must not enter the sewage system.

### 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:

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

Thorough dedusting.

(Contd. on page 4)

# Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 19.10.2018

Version number 2

Revision: 19.10.2018

**Trade name: Nickelbad WN 1 Ansatzsalz**  
**Nickel bath WN 1 (make-up salt)**

(Contd. of page 3)

- Ensure good ventilation/exhaustion at the workplace.
- Open and handle receptacle with care.
- **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:** No special requirements.
- **Information about storage in one common storage facility:** Not required.
- **Further information about storage conditions:**
- Keep receptacle tightly sealed.
- Store under lock and key and with access restricted to technical experts or their assistants only.
- **Storage class:** 6.1 D
- **7.3 Specific end use(s)** No further relevant information available.

## 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:**

#### 7786-81-4 nickel sulphate

WEL	Long-term value: 0.1 mg/m <sup>3</sup> as Ni; Sk; Carc; Sen
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#### 7718-54-9 nickel dichloride

WEL	Long-term value: 0.1 mg/m <sup>3</sup> as Ni; Sk; Carc; Sen
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- **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.
- Avoid contact with the skin.
- Avoid contact with the eyes and skin.

#### · **Respiratory protection:**

Use suitable respiratory protective device in case of insufficient ventilation.

Short term filter device:

Filter P2

#### · **Protection of hands:**



Protective gloves

#### · **Material of gloves**

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

Butyl rubber, BR

Fluorocarbon rubber (Viton)

Nitrile rubber, NBR

Chloroprene rubber, CR

(Contd. on page 5)

## Safety data sheet

according to 1907/2006/EC, Article 31

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Version number 2

Revision: 19.10.2018

**Trade name: Nickelbad WN 1 Ansatzsalz**  
**Nickel bath WN 1 (make-up salt)**

(Contd. of page 4)

· **Penetration time of glove material**

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

· **Eye protection:**



Tightly sealed goggles

· **Body protection:** Protective work clothing

### SECTION 9: Physical and chemical properties

· **9.1 Information on basic physical and chemical properties**

· **General Information**

· **Appearance:**

Form: Crystalline powder

Colour: Light green

· **Odour:** Odourless

· **Odour threshold:** Not determined.

· **pH-value (200 g/l) at 20 °C:** 4-5

· **Change in condition**

Melting point/freezing point: Undetermined.

Initial boiling point and boiling range: Undetermined.

· **Flash point:** Not applicable.

· **Flammability (solid, gas):** Not determined.

· **Decomposition temperature:** Not determined.

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

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

· **Explosion limits:**

Lower: Not determined.

Upper: Not determined.

· **Vapour pressure:** Not applicable.

· **Density at 20 °C:** 1.9 - 2.1 g/cm<sup>3</sup>

· **Relative density** Not determined.

· **Vapour density** Not applicable.

· **Evaporation rate** Not applicable.

· **Solubility in / Miscibility with water:** Soluble.

· **Partition coefficient: n-octanol/water:** Not determined.

· **Viscosity:**

Dynamic: Not applicable.

Kinematic: Not applicable.

· **Solvent content:**

Organic solvents: 0.0 %

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

GB

(Contd. on page 6)

# Safety data sheet

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Printing date 19.10.2018

Version number 2

Revision: 19.10.2018

**Trade name: Nickelbad WN 1 Ansatzsalz**  
**Nickel bath WN 1 (make-up salt)**

(Contd. of page 5)

## SECTION 10: Stability and reactivity

- **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.  
 To avoid thermal decomposition do not overheat.
- **10.3 Possibility of hazardous reactions** Reacts with strong oxidising agents.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials:** No further relevant information available.
- **10.6 Hazardous decomposition products:**  
 Poisonous gases/vapours  
 Sulphur trioxide (SO<sub>3</sub>) or SO<sub>3</sub>-mist

## SECTION 11: Toxicological information

- **11.1 Information on toxicological effects**

- **Acute toxicity**

Harmful if swallowed or if inhaled.

- **LD/LC50 values relevant for classification:**

**ATE (Acute Toxicity Estimates)**

Oral	LD50	493-625 mg/kg (rat)
Inhalative	LC50/4 h	2.67 mg/l

**7786-81-4 nickel sulphate**

Oral	LD50	264 mg/kg (rat)
Inhalative	LC50/4 h	1.5 mg/l (ATE)

**10043-35-3 boric acid**

Oral	LD50	2,660 mg/kg (rat)
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**7718-54-9 nickel dichloride**

Oral	LD50	105-681 mg/kg (rat)
Inhalative	LC50/4 h	0.5 mg/l (ATE)

- **Primary irritant effect:**
- **Skin corrosion/irritation**  
 Causes skin irritation.
- **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 fertility. 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.

GB

(Contd. on page 7)

# Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 19.10.2018

Version number 2

Revision: 19.10.2018

**Trade name: Nickelbad WN 1 Ansatzsalz**  
**Nickel bath WN 1 (make-up salt)**

(Contd. of page 6)

## SECTION 12: Ecological information

### · 12.1 Toxicity

#### · Aquatic toxicity:

#### 10043-35-3 boric acid

LC50	1,021 mg/l (96h) (Lepomis macrochirus (bluegrill))
	279 mg/l (96h) (Ptychocheilus lucius(Colorado pikeminno))
EC50	133 mg/l (48h) (Daphnia magna (water flea))
LC50	53.2 mg/l (21d) (Daphnia magna (water flea))

· **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:** Very toxic for fish

#### · Additional ecological information:

#### · General notes:

Also poisonous for fish and plankton in water bodies.

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

#### · European waste catalogue

11 00 00	WASTES FROM CHEMICAL SURFACE TREATMENT AND COATING OF METALS AND OTHER MATERIALS; NON-FERROUS HYDRO-METALLURGY
11 01 00	wastes from chemical surface treatment and coating of metals and other materials (for example galvanic processes, zinc coating processes, pickling processes, etching, phosphating, alkaline degreasing, anodising)
11 01 98*	other wastes containing hazardous substances

#### · Uncleaned packaging:

#### · Recommendation:

Empty contaminated packagings thoroughly. They may be recycled after thorough and proper cleaning.

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

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

## SECTION 14: Transport information

### · 14.1 UN-Number

#### · ADR, IMDG, IATA

3077

(Contd. on page 8)

GB



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Printing date 19.10.2018

Version number 2

Revision: 19.10.2018

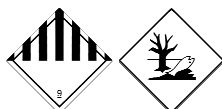
**Trade name: Nickelbad WN 1 Ansatzsalz**  
**Nickel bath WN 1 (make-up salt)**

(Contd. of page 7)

· **14.2 UN proper shipping name**  
· **ADR** 3077 ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (nickel sulphate, nickel dichloride)  
· **IMDG, IATA** ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S. (nickel sulphate, nickel dichloride)

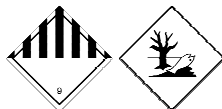
· **14.3 Transport hazard class(es)**

· **ADR**



· **Class** 9 (M7) 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 substances: nickel sulphate, nickel dichloride

· **Marine pollutant:**

Yes

· **Special marking (ADR):**

Symbol (fish and tree)

· **Special marking (IATA):**

Symbol (fish and tree)

Symbol (fish and tree)

· **14.6 Special precautions for user**

Warning: Miscellaneous dangerous substances and articles.

· **Danger code (Kemler):**

90

· **EMS Number:**

F-A,S-F

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

Not applicable.

· **Transport/Additional information:**

· **ADR**

· **Limited quantities (LQ)**

5KG

· **Transport category**

3

· **Tunnel restriction code**

E

· **UN "Model Regulation":**

UN3077, ENVIRONMENTALLY HAZARDOUS SUBSTANCE, SOLID, N.O.S., 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.

(Contd. on page 9)



# Safety data sheet

according to 1907/2006/EC, Article 31

Printing date 19.10.2018

Version number 2

Revision: 19.10.2018

**Trade name: Nickelbad WN 1 Ansatzsalz**  
**Nickel bath WN 1 (make-up salt)**

(Contd. of page 8)

- **Seveso category E1** Hazardous to the Aquatic Environment
- **Qualifying quantity (tonnes) for the application of lower-tier requirements** 100 t
- **Qualifying quantity (tonnes) for the application of upper-tier requirements** 200 t
- **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 27, 28

- **National regulations:**

- **Technical instructions (air):**

Class	Share in %
II	45.5

- **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
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- **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  
 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

(Contd. on page 10)

**Safety data sheet**  
according to 1907/2006/EC, Article 31

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**Trade name: Nickelbad WN 1 Ansatzsalz**  
**Nickel bath WN 1 (make-up salt)**

(Contd. of page 9)

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

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