

Safety data sheet

according to EU 2015/830

Printing date 04.11.2020

Revision: 04.11.2020

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

· 1.1 Product identifier

· Trade name: **riag Ni 149 Make up**

· Article number: 149110.XXX

· 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 Electroplating auxiliary

· 1.3 Details of the supplier of the safety data sheet

· Manufacturer/Supplier:

riag Oberflächentechnik AG

Murgstrasse 19a

CH-9545 Wängi Tel.: +41 (0)52 369 70 70 Fax: +41 (0)52 369 70 79 info@riag.ch

· Further information obtainable from:

riag Technik

Tel.: +41 (0) 52 369 70 80; e-mail: info@riag.ch

· 1.4 Emergency telephone number: 08:00 - 17:00: Tel. +41 52 369 70 80

SECTION 2: Hazards identification

· 2.1 Classification of the substance or mixture

· Classification according to Regulation (EC) No 1272/2008



GHS06 skull and crossbones

Acute Tox. 3 H331 Toxic if inhaled.



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 H360D May damage the unborn child.

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



GHS05 corrosion

Eye Dam. 1 H318 Causes serious eye damage.



GHS09 environment

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



GHS07

Skin Irrit. 2 H315 Causes skin irritation.

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

STOT SE 3 H335 May cause respiratory irritation.

· 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)

CH/EN

Safety data sheet

according to EU 2015/830

Printing date 04.11.2020

Revision: 04.11.2020

Trade name: **riag Ni 149 Make up**

(Contd. of page 1)

· **Hazard pictograms**

GHS05 GHS06 GHS08 GHS09

· **Signal word** *Danger*· **Hazard-determining components of labelling:**

nickel hydroxycarbonate
5-Sulphosalicylic acid dihydrate

· **Hazard statements**

H331 Toxic if inhaled.
H315 Causes skin irritation.
H318 Causes serious eye damage.
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.
H335 May cause respiratory irritation.
H372 Causes damage to organs through prolonged or repeated exposure.
H411 Toxic to aquatic life with long lasting effects.

· **Precautionary statements**

P260 Do not breathe mist/vapours/spray.
P280 Wear protective gloves / eye protection.
P304+P340 IF INHALED: Remove person to fresh air and keep comfortable for breathing.
P305+P351+P338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
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.

· **Additional information:**

Restricted to professional users.

SECTION 3: Composition/information on ingredients

· **3.2 Chemical characterisation: Mixtures**

· **Description:** *Mixture of substances listed below with nonhazardous additions.*

· **Dangerous components:**

| | | |
|---|---|------------|
| CAS: 5965-83-3 EINECS: 202-555-6 | 5-Sulphosalicylic acid dihydrate ☠ Eye Dam. 1, H318; ⚠ Skin Irrit. 2, H315; STOT SE 3, H335 | ≥20- ≤25% |
| CAS: 12607-70-4 EINECS: 235-715-9 Reg.nr.: 01-2119490826-25 | nickel hydroxycarbonate ☠ Acute Tox. 2, H330; ⚠ 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; Skin Irrit. 2, H315; Skin Sens. 1, H317 | ≥10- <25% |
| CAS: 825-90-1 EINECS: 215-550-0 | Sodium 4-hydroxybenzenesulfonate ⚠ Eye Irrit. 2, H319 | ≥2.5- <10% |

· **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.*

(Contd. on page 3)

CH/EN

Safety data sheet according to EU 2015/830

Printing date 04.11.2020

Revision: 04.11.2020

Trade name: riag Ni 149 Make up

(Contd. of page 2)

- **After inhalation:** Supply fresh air; consult doctor in case of complaints.
- **After skin contact:** Immediately wash with water and soap and rinse thoroughly.
- **After eye contact:** Rinse opened eye for several minutes under running water. Then consult a doctor.
- **After swallowing:**
Rinse out mouth.
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:** CO₂, powder or water spray. Fight larger fire with alcohol resistant foam.
- **5.3 Advice for firefighters**
- **Protective equipment:**
Wear self-contained respiratory protective device.
Wear fully protective suit.
- **Additional information**
Dispose of fire debris and contaminated fire fighting water in accordance with official regulations.
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.
Avoid contact with the eyes and skin.
- **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.
Prevent from spreading (e.g. by damming-in or oil barriers).
- **6.3 Methods and material for containment and cleaning up:**
Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders).
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**
Avoid contact with the eyes and skin.
Keep receptacles tightly sealed.
Ensure good ventilation/exhaustion at the workplace.
Open and handle receptacle with care.
Prevent formation of aerosols.
- **7.2 Conditions for safe storage, including any incompatibilities**
- **Storage:**
- **Requirements to be met by storerooms and receptacles:** Prevent any seepage into the ground.
- **Information about storage in one common storage facility:** Store away from foodstuffs.
- **Further information about storage conditions:**
Protect from frost.
Keep container tightly sealed.
Store receptacle in a well ventilated area.
Store under lock and key and with access restricted to technical experts or their assistants only.

(Contd. on page 4)

Safety data sheet according to EU 2015/830

Printing date 04.11.2020

Revision: 04.11.2020

Trade name: riag Ni 149 Make up

(Contd. of page 3)

- **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:**

12607-70-4 nickel hydroxycarbonate

| | |
|-------------------|---|
| MAK (Switzerland) | Long-term value: 0.05e mg/m ³ S B CIA; als Ni berechnet |
|-------------------|---|

- **Additional information:** The lists valid during the making were used as basis.

· 8.2 Exposure controls

· **Personal protective equipment:**

· **General protective and hygienic measures:**

Immediately remove all soiled and contaminated clothing

Avoid contact with the eyes and skin.

Wash hands before breaks and at the end of work.

Store protective clothing separately.

Do not inhale gases / fumes / aerosols.

Pregnant women should strictly avoid inhalation or skin contact.

Do not eat, drink, smoke or sniff while working.

Keep away from foodstuffs, beverages and feed.

· **Respiratory protection:**

Use suitable respiratory protective device only when aerosol or mist is formed.

In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

EN 149

Filter P2

· **Protection of hands:**

Protective gloves

EN 374 Index 6

· **Material of gloves**

Nitrile rubber, NBR

Recommended thickness of the material: ≥ 0.4 mm

· **Penetration time of glove material** > 480 min.

· **Eye protection:**



Tightly sealed goggles

EN 166

SECTION 9: Physical and chemical properties

· 9.1 Information on basic physical and chemical properties

· **General Information**

· **Appearance:**

Form: Fluid

Colour: Green

· **Odour:** Odourless

· **Odour threshold:** Not determined.

· **pH-value at 20 °C:** 4.3-5.4

(Contd. on page 5)

CH/EN

Safety data sheet according to EU 2015/830

Printing date 04.11.2020

Revision: 04.11.2020

Trade name: riag Ni 149 Make up

(Contd. of page 4)

- | | |
|---|---|
| · Change in condition Melting point/freezing point: | Undetermined. |
| Initial boiling point and boiling range: | Undetermined. |
| · Flash point: | Not applicable. |
| · Flammability (solid, gas): | Not applicable. |
| · 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 determined. |
| · Density at 20 °C: | 1.18-1.22 g/cm ³ |
| · Relative density | Not determined. |
| · Vapour density | Not determined. |
| · Evaporation rate | Not determined. |
| · Solubility in / Miscibility with water: | Fully miscible. |
| · Partition coefficient: n-octanol/water: | Not determined. |
| · Viscosity: Dynamic: | Not determined. |
| Kinematic: | Not determined. |
| · 9.2 Other information | No further relevant information available. |

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.
- **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**
Toxic if inhaled.

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

5965-83-3 5-Sulphosalicylic acid dihydrate

| | | |
|------|------|-------------------|
| Oral | LD50 | 2,450 mg/kg (rat) |
|------|------|-------------------|

12607-70-4 nickel hydroxycarbonate

| | | |
|------------|-----------|-------------------|
| Oral | LD50 | 2,500 mg/kg (rat) |
| Inhalative | LC50 (4h) | 0.261 mg/L (rat) |

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

(Contd. on page 6)

CH/EN

Safety data sheet according to EU 2015/830

Printing date 04.11.2020

Revision: 04.11.2020

Trade name: riag Ni 149 Make up

(Contd. of page 5)

- **Serious eye damage/irritation**
Causes serious eye damage.
- **Respiratory or skin sensitisation**
May cause allergy or asthma symptoms or breathing difficulties if inhaled.
May cause an allergic skin reaction.
- **CMR effects (carcinogenicity, 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**
May cause respiratory irritation.
- **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:

5965-83-3 5-Sulphosalicylic acid dihydrate

| | |
|---------------------|---|
| EC50 (48h) (static) | >100 mg/L (<i>Daphnia magna</i>) (OECD 202) |
| EC50 (72h) (static) | >100 mg/L (<i>pseudokirchneriella subcapitata</i>) (OECD 201) |

12607-70-4 nickel hydroxycarbonate

| | |
|------------|--|
| LC50 (96h) | 320 mg/L (<i>Brachydanio rerio</i>) |
| | 0.23 mg/L (<i>Pimephales promelas</i>) |

- **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.

· Ecotoxicological effects:

- **Remark:** Toxic for fish

· Additional ecological information:

· General notes:

Water hazard 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.

Must not reach sewage water or drainage ditch undiluted or unneutralised.

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

Also poisonous for fish and plankton in water bodies.

The product contains materials that are harmful to the environment.

Toxic for aquatic organisms

- **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.

Hand over to hazardous waste disposers.

· European waste catalogue

| | |
|-----------|--|
| 11 01 98* | other wastes containing hazardous substances |
|-----------|--|

(Contd. on page 7)

CH/EN

Safety data sheet
according to EU 2015/830

Printing date 04.11.2020

Revision: 04.11.2020



Trade name: riag Ni 149 Make up

(Contd. of page 6)

15 01 10* packaging containing residues of or contaminated by hazardous substances

- **Uncleaned packaging:**
- **Recommendation:**
Packaging may be reused or recycled after 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 | UN3287 |
| · 14.2 UN proper shipping name · ADR · IMDG, IATA | 3287 TOXIC LIQUID, INORGANIC, N.O.S. (nickel hydroxycarbonate), ENVIRONMENTALLY HAZARDOUS TOXIC LIQUID, INORGANIC, N.O.S. (nickel hydroxycarbonate) |
| · 14.3 Transport hazard class(es) · ADR | |
| |  |
| · Class · Label | 6.1 (T4) Toxic substances. 6.1 |
| · IMDG, IATA | |
| |  |
| · Class · Label | 6.1 Toxic substances. 6.1 |
| · 14.4 Packing group · ADR, IMDG, IATA | III |
| · 14.5 Environmental hazards: · Special marking (ADR): | Symbol (fish and tree) |
| · 14.6 Special precautions for user · Hazard identification number (Kemler code): · EMS Number: · Stowage Category · Stowage Code | Warning: Toxic substances. 60 F-A,S-A A SW2 Clear of living quarters. |
| · 14.7 Transport in bulk according to Annex II of Marpol and the IBC Code | Not applicable. |
| · Transport/Additional information: | |
| · ADR · Limited quantities (LQ) · Excepted quantities (EQ) | 5L Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml |
| · Transport category · Tunnel restriction code | 2 E |

(Contd. on page 8)

CH/EN

Safety data sheet according to EU 2015/830

Printing date 04.11.2020

Revision: 04.11.2020

Trade name: riag Ni 149 Make up

(Contd. of page 7)

| | |
|--|--|
| <ul style="list-style-type: none"> · IMDG · Limited quantities (LQ) · Excepted quantities (EQ) | <p>5L Code: E1 Maximum net quantity per inner packaging: 30 ml Maximum net quantity per outer packaging: 1000 ml</p> |
| <ul style="list-style-type: none"> · UN "Model Regulation": | <p>UN 3287 TOXIC LIQUID, INORGANIC, N.O.S. (NICKEL HYDROXYCARBONATE), 6.1, III, ENVIRONMENTALLY HAZARDOUS</p> |

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**
H2 ACUTE TOXIC
E2 Hazardous to the Aquatic Environment
- **Qualifying quantity (tonnes) for the application of lower-tier requirements** 50 t
- **Qualifying quantity (tonnes) for the application of upper-tier requirements** 200 t
- **REGULATION (EC) No 1907/2006 ANNEX XVII** Conditions of restriction: 3, 30

· **DIRECTIVE 2011/65/EU on the restriction of the use of certain hazardous substances in electrical and electronic equipment – Annex II**

None of the ingredients is listed.

- **National regulations:** -
- **Information about limitation of use:**
Workers are not allowed to be exposed to the hazardous carcinogenic materials contained in this preparation.
Exceptions can be made by the authorities in certain cases.
Employment restrictions concerning juveniles must be observed.
Employment restrictions concerning women of child-bearing age must be observed.
- **Waterhazard class:** Water hazard class 3 (Self-assessment): extremely hazardous for water.

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**
H302 Harmful if swallowed.
H315 Causes skin irritation.
H317 May cause an allergic skin reaction.
H318 Causes serious eye damage.
H319 Causes serious eye irritation.
H330 Fatal if inhaled.
H334 May cause allergy or asthma symptoms or breathing difficulties if inhaled.
H335 May cause respiratory irritation.
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.
H400 Very toxic to aquatic life.
H410 Very toxic to aquatic life with long lasting effects.
- **Abbreviations and acronyms:**
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

(Contd. on page 9)

CH/EN

Safety data sheet
according to EU 2015/830

Printing date 04.11.2020

Revision: 04.11.2020

Trade name: riag Ni 149 Make up

(Contd. of page 8)

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
Acute Tox. 4: Acute toxicity - oral – Category 4
Acute Tox. 2: Acute toxicity - inhalation – Category 2
Acute Tox. 3: Acute toxicity - inhalation – Category 3
Skin Irrit. 2: Skin corrosion/irritation – Category 2
Eye Dam. 1: Serious eye damage/eye irritation – Category 1
Eye Irrit. 2: Serious eye damage/eye 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 1A
Repr. 1B: Reproductive toxicity – Category 1B
STOT SE 3: Specific target organ toxicity (single exposure) – Category 3
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.**

CH/EN