

# Article information sheet (AIS)

**Product name NiH33/NiH33 PTFE**  
Item number: 82020, 82021

Version: 2.1  
revised on: 17.02.2023

**Description:** Hydrogen electrode NiH33

**Delivery form:** The catalyst mass is firmly pressed into a nickel mesh.

**Article 82020:** NiH33 without PTFE film

**Article 82021:** NiH33 with gas permeable, non-conductive PTFE film

**Use:** Air electrode for scientific research & development and industrial use e.g. in batteries, fuel cells, electrolyzers

## Supplier

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## Composition/information on ingredients

Component	Classification	H phrases
Nickel catalyst contains: Nickel oxide  	Carcinogenicity, category 1A Specific target organ toxicity (repeated exposure) category 1 Sensitisation of the skin, category 1 Hazardous to waters, chronic category 4	H351 H350i H372 H317 H412
Nickel  	Carcinogenicity, category 2 Specific target organ toxicity (repeated exposure) category 1 Sensitisation of the skin, category 1 Hazardous to waters, chronic category 3	H351 H372 H317 H412
Alumina oxide	No hazardous ingredient	

**H350i** may cause cancer by inhalation

**H351** can probably cause cancer

**H372** damages the organs during prolonged and repeated exposure

**H317** can cause allergic skin reactions

**H412** Harmful to aquatic organisms, with long-term effects

**Other non-hazardous ingredients:** polytetrafluoroethylene

## First-aid measures

**After eye contact:** Rinse the eye under running water for 10 minutes with the eyelids wide open, protecting the uninjured eye. Ensure medical treatment.

**After skin contact:** Wash affected skin areas thoroughly under running water with soap. In case of subjectively felt or objectively recognisable skin changes, seek medical treatment.

**After inhalation:** Supply fresh air.

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### Fire-fighting measures

**Suitable extinguishing media:** Adjust extinguishing measures to the environment.

**Special hazards arising from the substance or mixture:** Product itself is not flammable. However, in case of fire (environmental fire), nickel-containing gases and hydrogen fluoride may be released.

### Handling and storage

Pay attention to cleanliness in the workplace.

All rooms, installations and equipment must be cleaned regularly. Use personal protective equipment when cleaning. Avoid dust formation.

Store under lock and key or only accessible to competent persons.

### Personal protection

Do not eat, drink or smoke at work. Do not inhale dust. Keep away from food, drink and feed.

Avoid contact with the skin. Skin cleaning is necessary after substance contact. Wash skin with soap and water before breaks and at the end of work.

#### Recommended hand protection

Material of gloves: Nitrile

glove thickness: 0.11mm

Penetration time: >480 min

### Stability and reactivity

The product is not water soluble.

No dangerous reactions are to be expected when used as intended.

Under normal conditions the product is chemically stable.

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### Toxicological information

Toxicological studies with the mixture are not available.

#### The following applies to nickel and its compounds:

May cause allergic skin reactions.

Damages the organs in case of prolonged or repeated exposure.

May probably cause cancer.

### Environmental information

#### For nickel and its compounds:

Harmful to aquatic organisms, with long-term effects.

Avoid release into the environment.

### Disposal considerations

Product residues must be disposed of in accordance with national and regional regulations.

### Transport information

Not relevant.

### Other provisions

Observe employment restrictions for expectant and nursing mothers.

Observe employment restrictions for young people.

**A chemical safety assessment was not carried out.**