Article information sheet (AIS)

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

Version: 2.0
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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, electrolysers

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 exposu 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 exposu category 1 Sensitisation of the skin, category 1 Hazardous to waters, chronic category 3	H351 H372 H317 H412
Aluminia 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.

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 Stabilitä

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.

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.