

# Safety Data Sheet

according to Regulation (EC) No 1907/2006

## Nickel Test sensitiv

Revision date: 05.10.2020

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

#### 1.1. Product identifier

Nickel Test sensitiv

#### 1.2. Relevant identified uses of the substance or mixture and uses advised against

##### Use of the substance/mixture

Rapid test to detect nickel release from metal objects

##### Uses advised against

No information available.

#### 1.3. Details of the supplier of the safety data sheet

Company name:	Squarix GmbH	
Street:	Elbestraße 10	
Place:	D-45768 Marl	
Telephone:	+49 2365-20400-0	Telefax: +49 2365-20400-60
e-mail:	info@squarix.de	
Contact person:	info@squarix.de	Telephone: +49 2365-20400-0
e-mail:	info@squarix.de	
Responsible Department:	info@squarix.de	

**1.4. Emergency telephone number:** +49 (0)228 - 19 240 (7 / 24)

### SECTION 2: Hazards identification

#### 2.1. Classification of the substance or mixture

##### Regulation (EC) No. 1272/2008

Hazard categories:

Skin corrosion/irritation: Skin Corr. 1B

Serious eye damage/eye irritation: Eye Dam. 1

Specific target organ toxicity - single exposure: STOT SE 3

Hazard Statements:

Causes severe skin burns and eye damage.

Causes serious eye damage.

May cause respiratory irritation.

#### 2.2. Label elements

##### Regulation (EC) No. 1272/2008

##### Hazard components for labelling

ammonia

**Signal word:** Danger

**Pictograms:**



##### Hazard statements

H314 Causes severe skin burns and eye damage.

H335 May cause respiratory irritation.

##### Precautionary statements

P101 If medical advice is needed, have product container or label at hand.

P102 Keep out of reach of children.

P261 Avoid breathing Vapour / Aerosol.

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P264	Wash hands thoroughly after handling.
P280	Wear protective gloves/protective clothing/eye protection/face protection/hearing protection.
P301+P330+P331	IF SWALLOWED: Rinse mouth. Do NOT induce vomiting.
P303+P361+P353	IF ON SKIN (or hair): Take off immediately all contaminated clothing. Rinse skin with water or shower.
P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P310	Immediately call a POISON CENTER/doctor.
P405	Store locked up.
P501	Dispose of contents/container to an appropriate recycling or disposal facility.

### Special labelling of certain mixtures

Read label before use.  
Read attached instructions before use.

### 2.3. Other hazards

No information available.

## SECTION 3: Composition/information on ingredients

### 3.2. Mixtures

#### Hazardous components

CAS No	Chemical name	Quantity		
	EC No	Index No	REACH No	
	GHS Classification			
1336-21-6	ammonia			5-10 %
	215-647-6	007-001-01-2		
	Acute Tox. 4, Skin Corr. 1B, STOT SE 3, Aquatic Acute 1; H302 H314 H335 H400			
64-17-5	ethanol, ethyl alcohol			5 %
	200-578-6	603-002-00-5	01-2119457610-43	
	Flam. Liq. 2, Eye Irrit. 2; H225 H319			

Full text of H and EUH statements: see section 16.

#### Specific concentration limits and M-factors

CAS No	EC No	Chemical name	Quantity
	Specific concentration limits and M-factors		
1336-21-6	215-647-6	ammonia	5-10 %
	STOT SE 3; H335: >= 5 - 100		
64-17-5	200-578-6	ethanol, ethyl alcohol	5 %
	Eye Irrit. 2; H319: >= 50 - 100		

## SECTION 4: First aid measures

### 4.1. Description of first aid measures

#### General information

First aider: Pay attention to self-protection!  
Remove contaminated, saturated clothing immediately.  
In case of accident or unwellness, seek medical advice immediately (show directions for use or safety data sheet if possible).

#### After inhalation

If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing.  
Call a doctor if you feel unwell.

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### **After contact with skin**

Change contaminated, saturated clothing.  
After contact with skin, wash immediately with plenty of water and soap.  
If skin irritation occurs: Get medical advice/attention.

### **After contact with eyes**

Rinse immediately carefully and thoroughly with eye-bath or water. Protect uninjured eye.  
Remove contact lenses, if present and easy to do. Continue rinsing.  
Consult an ophthalmologist.

### **After ingestion**

Rinse mouth.  
Let water be drunk in little sips (dilution effect). Never give anything by mouth to an unconscious person or a person with cramps.  
Do NOT induce vomiting.  
Get medical advice/attention if you feel unwell.

### **4.2. Most important symptoms and effects, both acute and delayed**

No information available.

### **4.3. Indication of any immediate medical attention and special treatment needed**

First Aid, decontamination, treatment of symptoms.

## **SECTION 5: Firefighting measures**

### **5.1. Extinguishing media**

#### **Suitable extinguishing media**

Dry extinguishing powder, Water spray jet, Carbon dioxide (CO<sub>2</sub>), alcohol resistant foam.

#### **Unsuitable extinguishing media**

Full water jet

### **5.2. Special hazards arising from the substance or mixture**

Hazardous combustion products: Carbon monoxide, Carbon dioxide

### **5.3. Advice for firefighters**

Fight fire with normal precautions from a reasonable distance.  
In case of fire: Evacuate area. Use water spray to cool containers.  
Special protective equipment for firefighters Protective clothing.  
In case of fire: Wear self-contained breathing apparatus.

### **Additional information**

Collect contaminated fire extinguishing water separately. Do not allow entering drains or surface water.  
Dispose of waste according to applicable legislation.

## **SECTION 6: Accidental release measures**

### **6.1. Personal precautions, protective equipment and emergency procedures**

See protective measures under point 7 and 8.  
Wear personal protection equipment (refer to section 8).  
To follow: Emergency procedures  
Avoid contact with skin, eyes and clothes.  
Provide adequate ventilation.  
Do not breathe gas/vapour/aerosol.  
In case of inadequate ventilation wear respiratory protection.

### **6.2. Environmental precautions**

Do not allow to enter into soil/subsoil.  
Do not allow to enter into surface water or drains.  
Cover drains.

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### 6.3. Methods and material for containment and cleaning up

Absorb with liquid-binding material (e.g. sand, diatomaceous earth, acid- or universal binding agents).  
Dispose of waste according to applicable legislation.

### 6.4. Reference to other sections

See protective measures under point 7 and 8.  
Disposal: see section 13

## SECTION 7: Handling and storage

### 7.1. Precautions for safe handling

#### Advice on safe handling

Wear personal protection equipment (refer to section 8).  
Avoid contact with eyes and skin.  
Keep container tightly closed.  
Provide adequate ventilation.  
Do not breathe vapour/aerosol.  
In case of inadequate ventilation wear respiratory protection.

#### Advice on protection against fire and explosion

Usual measures for fire prevention.

### 7.2. Conditions for safe storage, including any incompatibilities

#### Requirements for storage rooms and vessels

Keep locked up and out of reach of children.  
Keep/Store only in original container.  
Keep container tightly closed and in a well-ventilated place. Store in a cool dry place.  
Protect against direct sunlight.

#### Further information on storage conditions

Keep away from:  
Frost  
Heat  
Humidity  
Food and feedingstuffs

### 7.3. Specific end use(s)

No information available.

## SECTION 8: Exposure controls/personal protection

### 8.1. Control parameters

#### Exposure limits (EH40)

CAS No	Substance	ppm	mg/m <sup>3</sup>	fibres/ml	Category	Origin
7664-41-7	Ammonia, anhydrous	25	18		TWA (8 h)	WEL
		35	25		STEL (15 min)	WEL
64-17-5	Ethanol	1000	1920		TWA (8 h)	WEL

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### DNEL/DMEL values

CAS No	Substance	Exposure route	Effect	Value
64-17-5	ethanol, ethyl alcohol			
Worker DNEL, long-term		inhalation	systemic	950 mg/m <sup>3</sup>
Worker DNEL, acute		inhalation	local	1900 mg/m <sup>3</sup>
Worker DNEL, long-term		dermal	systemic	343 mg/kg bw/day
Consumer DNEL, long-term		inhalation	systemic	114 mg/m <sup>3</sup>
Consumer DNEL, acute		inhalation	local	950 mg/m <sup>3</sup>
Consumer DNEL, long-term		dermal	systemic	206 mg/kg bw/day
Consumer DNEL, long-term		oral	systemic	87 mg/kg bw/day

### PNEC values

CAS No	Substance	Value
64-17-5	ethanol, ethyl alcohol	
Environmental compartment		
Freshwater		0,96 mg/l
Freshwater (intermittent releases)		2,75 mg/l
Marine water		0,79 mg/l
Freshwater sediment		3,6 mg/kg
Marine sediment		2,9 mg/kg
Secondary poisoning		380 mg/kg
Micro-organisms in sewage treatment plants (STP)		580 mg/l
Soil		0,63 mg/kg

### Additional advice on limit values

Observe in addition any national regulations!

### 8.2. Exposure controls

#### Appropriate engineering controls

Provide adequate ventilation.

#### Protective and hygiene measures

Work in well-ventilated zones or use proper respiratory protection.

Wash hands before breaks and after work.

When using do not eat, drink, smoke, sniff.

Only wear fitting, comfortable and clean protective clothing.

Take off contaminated clothing and wash it before reuse.

Avoid contact with skin, eyes and clothes.

Before starting work, apply solvent-resistant skincare preparations.

#### Eye/face protection

Eye glasses with side protection

goggles

#### Hand protection

Tested protective gloves must be worn: EN ISO 374

The quality of the protective gloves resistant to chemicals must be chosen as a function of the specific working place concentration and quantity of hazardous substances.

Suitable material: Butyl caoutchouc (butyl rubber)

Wearing time with permanent contact  $\geq 8$  hour(s)

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Thickness of the glove material  $\geq 0,7\text{mm}$

For special purposes, it is recommended to check the resistance to chemicals of the protective gloves mentioned above together with the supplier of these gloves. Thickness of the glove material, Breakthrough times and swelling properties of the material must be taken into consideration.

Observe the wear time limits as specified by the manufacturer.

Check leak tightness/impermeability prior to use.

### Skin protection

Only wear fitting, comfortable and clean protective clothing.

### Respiratory protection

If technical exhaust or ventilation measures are not possible or insufficient, respiratory protection must be worn.

## SECTION 9: Physical and chemical properties

### 9.1. Information on basic physical and chemical properties

Physical state:	Liquid
Colour:	clear
Odour:	stinging

pH-Value (at 20 °C): ~ 11

#### Changes in the physical state

Melting point:	No data available
Initial boiling point and boiling range:	No data available
Sublimation point:	No data available
Softening point:	No data available
Pour point:	No data available
Flash point:	>60 °C
Sustaining combustion:	No data available

#### Flammability

Solid:	No data available
Gas:	No data available

#### Explosive properties

The product is not: explosive

Lower explosion limits:	No data available
Upper explosion limits:	No data available
Ignition temperature:	No data available

#### Auto-ignition temperature

Solid:	No data available
Gas:	No data available

Decomposition temperature: not applicable

#### Oxidizing properties

Not oxidising.

Vapour pressure: No data available  
(at 20 °C)

Density (at 20 °C): No data available

Water solubility: miscible

#### Solubility in other solvents

No information available.

Partition coefficient: No data available

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Viscosity / dynamic: No data available  
Vapour density: No data available  
Evaporation rate: No data available

### 9.2. Other information

No information available.

## SECTION 10: Stability and reactivity

### 10.1. Reactivity

No information available.

### 10.2. Chemical stability

The product is chemically stable under recommended conditions of storage, use and temperature.

### 10.3. Possibility of hazardous reactions

Strong acid, Oxidizing agent

### 10.4. Conditions to avoid

Protect against direct sunlight.

### 10.5. Incompatible materials

No information available.

### 10.6. Hazardous decomposition products

No information available.

## SECTION 11: Toxicological information

### 11.1. Information on toxicological effects

#### Acute toxicity

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

CAS No	Chemical name				
	Exposure route	Dose	Species	Source	Method
1336-21-6	ammonia				
	oral	ATE 500 mg/kg			
64-17-5	ethanol, ethyl alcohol				
	oral	LD50 10470 mg/kg	Rat	Study report (1976)	OECD Guideline 401
	inhalation (4 h) vapour	LC50 124,7 mg/l	Rat	Study report (1980)	OECD Guideline 403

#### Irritation and corrosivity

Causes severe skin burns and eye damage.  
Causes serious eye damage.

#### Sensitising effects

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

#### Carcinogenic/mutagenic/toxic effects for reproduction

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

#### STOT-single exposure

May cause respiratory irritation. (ammonia)

#### STOT-repeated exposure

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

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### Aspiration hazard

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

### Further information

There are no data available on the mixture itself.

Reference to other sections :2,3

## SECTION 12: Ecological information

### 12.1. Toxicity

CAS No	Chemical name					
	Aquatic toxicity	Dose	[h]   [d]	Species	Source	Method
1336-21-6	ammonia					
	Acute fish toxicity	LC50 mg/l	0,53	96 h	Onchorhynchus mykiss	
	Acute crustacea toxicity	EC50	24 mg/l	48 h	Daphnia magna	
	Fish toxicity	NOEC	1,2 mg/l	61 d	Oncorhynchus gorbuscha	
64-17-5	ethanol, ethyl alcohol					
	Acute fish toxicity	LC50 mg/l	15400	96 h	Lepomis macrochirus	EPA-660/3-75-00 9, 1975
	Acute algae toxicity	ErC50 mg/l	ca. 22000	96 h	Pseudokirchneriella subcapitata	OECD Guideline 201
	Acute crustacea toxicity	EC50 mg/l	> 10000	48 h	Daphnia magna	DIN 38412 Teil 11
	Fish toxicity	NOEC mg/l	> 79	100 d	Oryzias latipes	
	Algae toxicity	NOEC mg/l	5400	5 d	Skeletonema costatum	
	Crustacea toxicity	NOEC	2 mg/l	10 d	Ceriodaphnia dubia	

### 12.2. Persistence and degradability

CAS No	Chemical name			
	Method	Value	d	Source
	Evaluation			
64-17-5	ethanol, ethyl alcohol			
		97%	28	
	Readily biodegradable (according to OECD criteria).			

### 12.3. Bioaccumulative potential

#### Partition coefficient n-octanol/water

CAS No	Chemical name	Log Pow
1336-21-6	ammonia	-1,38
64-17-5	ethanol, ethyl alcohol	-0,77

#### BCF

CAS No	Chemical name	BCF	Species	Source
64-17-5	ethanol, ethyl alcohol	1	Cyprinus carpio	Comparative Biochemi

### 12.4. Mobility in soil

No information available.

### 12.5. Results of PBT and vPvB assessment

The substances in the mixture do not meet the PBT/vPvB criteria according to REACH, annex XIII.



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### 12.6. Other adverse effects

No information available.

## SECTION 13: Disposal considerations

### 13.1. Waste treatment methods

#### Disposal recommendations

Dispose of waste according to applicable legislation.

#### Contaminated packaging

Dispose of waste according to applicable legislation.

## SECTION 14: Transport information

### Land transport (ADR/RID)

<b><u>14.1. UN number:</u></b>	UN 1719
<b><u>14.2. UN proper shipping name:</u></b>	CAUSTIC ALKALI LIQUID, N.O.S. (ammonia)
<b><u>14.3. Transport hazard class(es):</u></b>	8
<b><u>14.4. Packing group:</u></b>	III
Hazard label:	8
Classification code:	C5
Special Provisions:	274
Limited quantity:	5 L
Excepted quantity:	E1
Transport category:	3
Hazard No:	80
Tunnel restriction code:	E

### Inland waterways transport (ADN)

<b><u>14.1. UN number:</u></b>	UN 1719
<b><u>14.2. UN proper shipping name:</u></b>	CAUSTIC ALKALI LIQUID, N.O.S. (ammonia)
<b><u>14.3. Transport hazard class(es):</u></b>	8
<b><u>14.4. Packing group:</u></b>	III
Hazard label:	8
Classification code:	C5
Special Provisions:	274
Limited quantity:	5 L
Excepted quantity:	E1

### Marine transport (IMDG)

<b><u>14.1. UN number:</u></b>	UN 1719
<b><u>14.2. UN proper shipping name:</u></b>	CAUSTIC ALKALI LIQUID, N.O.S. (ammonia)
<b><u>14.3. Transport hazard class(es):</u></b>	8
<b><u>14.4. Packing group:</u></b>	III
Hazard label:	8
Special Provisions:	223, 274
Limited quantity:	5 L
Excepted quantity:	E1
EmS:	F-A, S-B

### Air transport (ICAO-TI/IATA-DGR)

<b><u>14.1. UN number:</u></b>	UN 1719
<b><u>14.2. UN proper shipping name:</u></b>	CAUSTIC ALKALI LIQUID, N.O.S. (ammonia)
<b><u>14.3. Transport hazard class(es):</u></b>	8

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<b>14.4. Packing group:</b>	III	
Hazard label:	8	
Special Provisions:	A3 A803	
Limited quantity Passenger:	1 L	
Passenger LQ:	Y841	
Excepted quantity:	E1	
IATA-packing instructions - Passenger:		852
IATA-max. quantity - Passenger:		5 L
IATA-packing instructions - Cargo:		856
IATA-max. quantity - Cargo:		60 L

### 14.5. Environmental hazards

ENVIRONMENTALLY HAZARDOUS: no

### 14.6. Special precautions for user

No information available.

### 14.7. Transport in bulk according to Annex II of Marpol and the IBC Code

No information available.

## SECTION 15: Regulatory information

### 15.1. Safety, health and environmental regulations/legislation specific for the substance or mixture

#### EU regulatory information

Restrictions on use (REACH, annex XVII):

Entry 3: ammonia; ethanol, ethyl alcohol

Information according to 2012/18/EU (SEVESO III): Not subject to 2012/18/EU (SEVESO III)

#### National regulatory information

Water hazard class (D): 1 - slightly hazardous to water

### 15.2. Chemical safety assessment

For the following substances of this mixture a chemical safety assessment has been carried out:  
ethanol, ethyl alcohol

## SECTION 16: Other information

### 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)  
Règlement concernant le transport international ferroviaire de marchandises dangereuses (Regulations  
Concerning the International Transport of Dangerous Goods by Rail)  
IMDG: International Maritime Code for Dangerous Goods  
IATA: International Air Transport Association  
IATA-DGR: Dangerous Goods Regulations by the "International Air Transport Association" (IATA)  
ICAO: International Civil Aviation Organization  
ICAO-TI: Technical Instructions by the "International Civil Aviation Organization" (ICAO)  
CAS: Chemical Abstracts Service (division of the American Chemical Society)  
GHS: Globally Harmonized System of Classification and Labelling of Chemicals  
CLP: Regulation on Classification, Labelling and Packaging of Substances and Mixtures,  
LC50: Lethal concentration, 50 percent  
LD50: Lethal dose, 50 percent  
EC50: Effectice concentration, 50 percent  
DNEL: Derived No Effect Level  
PNEC: Predicted No Effect Concentration  
PBT: Persistent, Bioaccumulative and Toxic

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vPvB: very Persistent and very Bioaccumulative

### Classification for mixtures and used evaluation method according to Regulation (EC) No. 1272/2008 [CLP]

Classification	Classification procedure
Skin Corr. 1B; H314	Calculation method
Eye Dam. 1; H318	Calculation method
STOT SE 3; H335	Calculation method

### Relevant H and EUH statements (number and full text)

H225	Highly flammable liquid and vapour.
H302	Harmful if swallowed.
H314	Causes severe skin burns and eye damage.
H318	Causes serious eye damage.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H400	Very toxic to aquatic life.

### Further Information

The information is based on the present level of our knowledge. It does not, however, give assurance of product properties and establishes no contract legal rights. The receiver of our product is singularly responsible for adhering to existing laws and regulations.

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*(The data for the hazardous ingredients were taken respectively from the last version of the sub-contractor's safety data sheet.)*