

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

### 1.1 Product identifier

Trade name: Total protein FS Reagent R1  
As part of the kits: 1 2311 XX XX XXX  
(The positions X code different packages.)

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

General use: Reagent for in-vitro diagnostics in human samples  
For professional use only

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

Company name: DiaSys Diagnostic Systems GmbH  
Street/POB-No.: Alte Strasse 9  
Postal Code, city: 65558 Holzheim  
WWW: <http://www.diasys.de>  
E-mail: [mail@diasys.de](mailto:mail@diasys.de)  
Telephone: +49 (0) 6432-9146-0  
Telefax: +49 (0) 6432-9146-32  
Department responsible for information:  
Corporate headquarters, Telephone: +49 (0) 6432-9146-0, Email: [mail@diasys.de](mailto:mail@diasys.de)

### 1.4 Emergency telephone number

Infraserv, Telephone: +49 (0) 69-305-6418

## SECTION 2: Hazards identification

### 2.1 Classification of the substance or mixture

Classification according to EC regulation 1272/2008 (CLP)

Met. Corr. 1; H290 May be corrosive to metals.

### 2.2 Label elements

#### Labelling (CLP)



Signal word: **Warning**

Hazard statements: H290 May be corrosive to metals.

Precautionary Statements: P234 Keep only in original packaging.  
P390 Absorb spillage to prevent material damage.

### 2.3 Other hazards

A corrosive effect cannot be ruled out because of the pH value.

Results of PBT and vPvB assessment:  
No data available

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### SECTION 3: Composition / information on ingredients

3.1 Substances: not applicable

#### 3.2 Mixtures

Chemical characterisation: Aqueous solution

Hazardous ingredients:

Ingredient	Designation	Content	Classification
REACH 01-2119457892-27-xxxx EC No. 215-185-5 CAS 1310-73-2	Sodium hydroxide	< 0.5 %	Met. Corr. 1; H290. Skin Corr. 1A; H314.

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

### SECTION 4: First aid measures

#### 4.1 Description of first aid measures

- In case of inhalation: Move victim to fresh air, put at rest and loosen restrictive clothing. Seek medical aid in case of troubles.
- Following skin contact: Take off immediately all contaminated clothing.  
After contact with skin, wash immediately with plenty of water.  
Cover with sterile dressing material to protect against infection. Seek medical attention.
- After eye contact: Immediately flush eyes with plenty of flowing water for 10 to 15 minutes holding eyelids apart. Remove contact lenses, if present and easy to do. Continue rinsing. Subsequently seek the immediate attention of an ophthalmologist.
- After swallowing: Rinse mouth immediately and drink plenty of water.  
Do not induce vomiting. Do not try to neutralize. Seek medical attention.

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

A corrosive effect cannot be ruled out because of the pH value. Can cause skin, eye and respiratory tract irritation.  
In case of ingestion: Irritant up to corrosive.

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

Treat symptomatically.

### SECTION 5: Firefighting measures

#### 5.1 Extinguishing media

Suitable extinguishing media:

Product is non-combustible. Extinguishing materials should therefore be selected according to surroundings.

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

Fires in the immediate vicinity may cause the development of dangerous vapours.  
In the event of a fire, the following may be produced when the water evaporates: Sodium compounds, carbon monoxide and carbon dioxide.

#### 5.3 Advice for firefighters

Special protective equipment for firefighters:

In case of surrounding fires: Wear self-contained breathing apparatus.

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Additional information: Hazchem-Code: 2R

**SECTION 6: Accidental release measures**

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

Avoid contact with skin and eyes. Do not breathe vapours. Wear appropriate protective equipment. Keep unprotected people away.

**6.2 Environmental precautions**

Do not allow to enter into ground-water, surface water or drains.

**6.3 Methods and material for containment and cleaning up**

Absorb spillage to prevent material damage. Dilute with plenty of water. Soak up with absorbent materials such as sand, siliceous earth, acid- or universal binder. Store in special closed containers and dispose of according to ordinance. Final cleaning.

**6.4 Reference to other sections**

Refer additionally to section 8 and 13.

**SECTION 7: Handling and storage**

**7.1 Precautions for safe handling**

Advices on safe handling: Provide adequate ventilation. Avoid contact with skin and eyes. Do not breathe vapours. Wear appropriate protective equipment. Wash hands before breaks and after work. Do not eat, drink or smoke when using this product. Take off immediately all contaminated clothing and wash it before reuse. Have eye wash bottle or eye rinse ready at work place.

**7.2 Conditions for safe storage, including any incompatibilities**

Requirements for storerooms and containers:

Keep containers tightly closed and at a temperature between 2 °C and 25 °C. Protect from light. Keep away from heat. Store containers in upright position. Unsuitable materials: Aluminium, zinc, tin.

Hints on joint storage:

Do not store together with ammonium compounds or acids. Keep away from food, drink and animal feedingstuffs.

**7.3 Specific end use(s)**

No information available.

**SECTION 8: Exposure controls/personal protection**

**8.1 Control parameters**

Occupational exposure limit values:

CAS No.	Designation	Type	Limit value
1310-73-2	Sodium hydroxide	Great Britain: WEL-STEL	2 mg/m <sup>3</sup>
		Ireland: 15 minutes	2 mg/m <sup>3</sup>

**8.2 Exposure controls**

When aerosols and vapours form: Withdraw by suction.

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### Personal protection equipment

#### Occupational exposure controls

- Respiratory protection: In case of inadequate ventilation wear respiratory protection. Respiratory protection must be worn whenever the WEL levels have been exceeded.  
Particulates filter (P2/P3) according to EN 143.
- Hand protection: Protective gloves according to EN 374.  
Glove material: Nitrile rubber-Layer thickness: 0.11 mm.  
Breakthrough time: >480 min.  
Observe glove manufacturer's instructions concerning penetrability and breakthrough time.
- Eye protection: Tightly sealed goggles according to EN 166.
- Body protection: Wear suitable protective clothing.
- General protection and hygiene measures:  
Do not breathe vapours. Do not get in eyes, on skin, or on clothing. Take off immediately all contaminated clothing and wash it before reuse. Do not eat, drink or smoke when using this product. Have eye wash bottle or eye rinse ready at work place. Wash hands before breaks and after work.

## SECTION 9: Physical and chemical properties

### 9.1 Information on basic physical and chemical properties

- Appearance: Physical state at 20 °C and 101.3 kPa: liquid  
Colour: colourless, clear
- Odour: odourless  
Odour threshold: No data available
- pH value: at 25 °C: 12.80 - 12.85
- Melting point/freezing point: approx. 0 °C  
Initial boiling point and boiling range: approx. 100 °C  
Flash point/flash point range: not combustible  
Evaporation rate: No data available  
Flammability: No data available  
Explosion limits: No data available  
Vapour pressure: No data available  
Vapour density: No data available  
Density: at 20 °C: 1.00 g/mL  
Water solubility: at 20 °C: completely miscible  
Partition coefficient: n-octanol/water: No data available  
Auto-ignition temperature: No data available  
Decomposition temperature: No data available  
Viscosity, kinematic: No data available  
Explosive properties: No data available  
Oxidizing characteristics: No data available

### 9.2 Other information

- Additional information: No data available

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**SECTION 10: Stability and reactivity**

**10.1 Reactivity**

May be corrosive to metals.

**10.2 Chemical stability**

Stable under recommended storage conditions.

**10.3 Possibility of hazardous reactions**

Reacts with ammonium compounds: Formation of ammonia.

**10.4 Conditions to avoid**

Keep away from heat.

**10.5 Incompatible materials**

acids

**10.6 Hazardous decomposition products**

No hazardous decomposition products when regulations for storage and handling are observed.

Thermal decomposition: No data available

**SECTION 11: Toxicological information**

**11.1 Information on toxicological effects**

Toxicological effects: Acute toxicity (oral): Lack of data.  
Acute toxicity (dermal): Lack of data.  
Acute toxicity (inhalative): Lack of data.  
Skin corrosion/irritation: Lack of data.  
Serious eye damage/irritation: Lack of data.  
Sensitisation to the respiratory tract: Lack of data.  
Skin sensitisation: Lack of data.  
Germ cell mutagenicity/Genotoxicity: Lack of data.  
Carcinogenicity: Lack of data.  
Reproductive toxicity: Lack of data.  
Effects on or via lactation: Lack of data.  
Specific target organ toxicity (single exposure): Lack of data.  
Specific target organ toxicity (repeated exposure): Lack of data.  
Aspiration hazard: Lack of data.

**Symptoms**

A corrosive effect cannot be ruled out because of the pH value. Can cause skin, eye and respiratory tract irritation.  
In case of ingestion: Irritant up to corrosive.



# SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH) and Regulation (EU) No. 2015/830

Revision date: 23/1/2019  
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### SECTION 12: Ecological information

#### 12.1 Toxicity

Aquatic toxicity: Harmful effects on water organisms by modification of pH-value.

#### 12.2 Persistence and degradability

Further details: Methods for the determination of biodegradability are not applicable to inorganic substances.

#### 12.3 Bioaccumulative potential

Partition coefficient: n-octanol/water:  
No data available

#### 12.4 Mobility in soil

No data available

#### 12.5 Results of PBT and vPvB assessment

No data available

#### 12.6 Other adverse effects

General information: Do not allow to enter into ground-water, surface water or drains.

### SECTION 13: Disposal considerations

#### 13.1 Waste treatment methods

##### Product

Waste key number: 16 05 06\* = Laboratory chemicals, consisting of or containing hazardous substances, including mixtures of laboratory chemicals.  
\* = Evidence for disposal must be provided.

Recommendation: Special waste. Dispose of waste according to applicable legislation.

##### Contaminated packaging

Waste key number: 15 01 02 = Plastic packaging

Recommendation: Dispose of waste according to applicable legislation.  
Non-contaminated packages may be recycled.

### SECTION 14: Transport information

#### 14.1 UN number

ADR/RID, IMDG, IATA-DGR:  
UN 1824

#### 14.2 UN proper shipping name

ADR/RID, IMDG, IATA-DGR:  
UN 1824, SODIUM HYDROXIDE SOLUTION

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### 14.3 Transport hazard class(es)

ADR/RID: Class 8, Code: C5  
IMDG: Class 8, Subrisk -  
IATA-DGR: Class 8



### 14.4 Packing group

ADR/RID, IMDG, IATA-DGR:  
III

### 14.5 Environmental hazards

Marine pollutant: no

### 14.6 Special precautions for user

#### Land transport (ADR/RID)

Warning board: ADR/RID: Kemmler-number 80, UN number UN 1824  
Hazard label: 8  
Limited quantities: 5 L  
EQ: E1  
Contaminated packaging - Instructions: P001 IBC03 LP01 R001  
Special provisions for packing together: MP19  
Portable tanks - Instructions: T4  
Portable tanks - Special provisions: TP1  
Tank coding: L4BN  
Tunnel restriction code: E

#### Sea transport (IMDG)

EmS: F-A, S-B  
Special provisions: 223  
Limited quantities: 5 L  
Excepted quantities: E1  
Contaminated packaging - Instructions: P001, LP01  
Contaminated packaging - Provisions: -  
IBC - Instructions: IBC03  
IBC - Provisions: -  
Tank instructions - IMO: -  
Tank instructions - UN: T4  
Tank instructions - Provisions: TP1  
Stowage and handling: Category A.  
Segregation: SG35  
Properties and observations: Colourless liquid. Corrosive to aluminium, zinc and tin. Reacts with ammonium salts, evolving ammonia gas. Causes burns to skin, eyes and mucous membranes. Reacts violently with acids.  
Segregation group: 18

#### Air transport (IATA)

Hazard label: Corrosive  
Excepted Quantity Code: E1  
Passenger and Cargo Aircraft: Ltd.Qty.: Pack.Instr. Y841 - Max. Net Qty/Pkg. 1 L  
Passenger and Cargo Aircraft: Pack.Instr. 852 - Max. Net Qty/Pkg. 5 L  
Cargo Aircraft only: Pack.Instr. 856 - Max. Net Qty/Pkg. 60 L  
Special provisions: A3 A803  
Emergency Response Guide-Code (ERG): 8L



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

No data available

## SECTION 15: Regulatory information

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

#### National regulations - Great Britain

Hazchem-Code: 2R  
No data available

### 15.2 Chemical Safety Assessment

For this mixture a chemical safety assessment is not required.

## SECTION 16: Other information

### Further information

Wording of the H-phrases under paragraph 2 and 3:

H290 = May be corrosive to metals.  
H314 = Causes severe skin burns and eye damage.

Reason of change: ADR/RID 2019

Date of first version: 30/11/2006

### Department issuing data sheet

Contact person: see section 1: Department responsible for information

For abbreviations and acronyms, see: ECHA Guidance on information requirements and chemical safety assessment, chapter R.20 (Table of terms and abbreviations).

The information in this data sheet has been established to our best knowledge and was up-to-date at time of revision. It does not represent a guarantee for the properties of the product described in terms of the legal warranty regulations.