

## Phosphate FS Reagent R1

Material number 1 5211 R1

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### 1. Product and company identification

#### Product identifier

Trade name: Phosphate FS Reagent R1  
As part of the kits: 1 5211 XX XX XXX  
(The positions X code different packages.)

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

General use: Reagent for in-vitro diagnostic use  
For professional use only

#### 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  
Dept. responsible for information:  
Corporate headquarters, Telephone: +49 (0) 6432-9146-0, Email: [mail@diasys.de](mailto:mail@diasys.de)

#### Emergency phone number

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

### 2. Hazards identification

#### Emergency overview

Appearance: Physical state at 68 °F and 101.3 kPa: liquid  
Color: colorless, clear  
Odor: like soap  
Classification: Corrosive to Metals - Category 1; Skin Irritation - Category 2; Eye Irritation - Category 2A;

Hazard symbols:



Signal word:

**Warning**

Hazard statements:

May be corrosive to metals.  
Causes skin irritation.  
Causes serious eye irritation.

Precautionary statements:

Keep only in original container.  
Wear protective gloves/protective clothing/eye protection/face protection.  
IF ON SKIN: Wash with plenty of water/soap.  
IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.  
If eye irritation persists: Get medical advice/attention.  
Absorb spillage to prevent material damage.



# SAFETY DATA SHEET

in accordance with 29 CFR 1910.1200 and ANSI standard Z400.1-2010

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### Regulatory status

This material is considered hazardous by the U.S. OSHA Hazard Communication Standard (29 CFR 1910.1200) and SIMDUT in Canada.

### Hazards not otherwise classified

A corrosive effect cannot be ruled out because of the pH value.  
see section 11: Toxicological information

## 3. Composition / Information on ingredients

Chemical characterization: Aqueous solution

Relevant ingredients:

CAS No.	Designation	Content	Classification
CAS 7664-93-9	Sulfuric acid	< 2 %	Corrosive to Metals - Category 1. Skin Corrosion - Category 1A.
CAS 9002-92-0	Dodecan-1-ol, ethoxylated	< 1 %	Acute Toxicity - oral - Category 4. Eye Damage - Category 1.

## 4. First aid measures

General information:	If medical advice is needed, have product container or label at hand.
In case of inhalation:	Move victim to fresh air. If you feel unwell, seek medical advice.
Following skin contact:	Take off contaminated clothing and wash it before reuse. 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. Never give anything by mouth to an unconscious person. Do not induce vomiting. Do not try to neutralize. Seek medical attention.

### Most important symptoms/effects, acute and delayed

Causes skin irritation. Causes serious eye irritation.

### Information to physician

Treat symptomatically.

## 5. Fire fighting measures

Flash point/flash point range:

not combustible

Auto-ignition temperature: No data available

Suitable extinguishing media:

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



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### Specific hazards arising from the chemical

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

Protective equipment and precautions for firefighters:

In case of surrounding fires: Wear a self-contained breathing apparatus and chemical protective clothing.

Additional information: Do not allow fire water to penetrate into surface or ground water.

## 6. Accidental release measures

Personal precautions: Provide adequate ventilation. Do not breathe mist/vapors/spray. Avoid contact with skin and eyes. Wear appropriate protective equipment. Keep unprotected people away.

Environmental precautions:

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

Methods for clean-up:

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.

## 7. Handling and storage

### Handling

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

### Storage

Requirements for storerooms and containers:

Keep containers tightly closed and at a temperature between 35.6 °F and 46.4 °F. Keep sterile. Do not freeze.

Unsuitable materials: metals

Keep only in original container.

Hints on joint storage:

Do not store together with: Alkali compounds, ammonia, alkalis.

Keep away from food, drink and animal feedingstuffs.

## 8. Exposure controls / personal protection

### Exposure guidelines

Occupational exposure limit values:

CAS No.	Designation	Type	Limit value
7664-93-9	Sulfuric acid	USA: ACGIH: TWA	0.2 mg/m <sup>3</sup> (thoracicfraction)
		USA: NIOSH: TWA	1 mg/m <sup>3</sup>
		USA: OSHA: TWA	1 mg/m <sup>3</sup>

### Engineering controls

Provide adequate ventilation, and local exhaust as needed.  
See also information in chapter 7, section storage.



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### Personal protection equipment (PPE)

Eye/face protection	Tightly sealed goggles according to OSHA Standard - 29 CFR: 1910.133 or ANSI Z87.1-2010.
Skin protection	Wear suitable protective clothing. Protective gloves according to OSHA Standard - 29 CFR: 1910.138. Glove material: Nitrile rubber - Breakthrough time: >480 min. Observe glove manufacturer's instructions concerning penetrability and breakthrough time.
Respiratory protection:	Respiratory protection must be worn whenever the TLV (WEL) levels have been exceeded.
General hygiene considerations:	Avoid contact with skin and eyes. Do not breathe mist/vapors/spray. Wash hands before breaks and after work. Do not eat, drink or smoke when using this product. Take off contaminated clothing and wash it before reuse. Have eye wash bottle or eye rinse ready at work place.

## 9. Physical and chemical properties

### Information on basic physical and chemical properties

Appearance:	Physical state at 68 °F and 101.3 kPa: liquid Color: colorless, clear
Odor:	like soap
Odor threshold:	No data available
pH value:	at 77 °F: 0.8
Melting point/freezing point:	approx. 32 °F (Water)
Initial boiling point and boiling range:	approx. 212 °F (Water)
Flash point/flash point range:	not combustible
Evaporation rate:	No data available
Flammability:	No data available
Explosion limits:	No data available
Vapor pressure:	No data available
Vapor density:	No data available
Density:	at 68 °F: 1.015 g/mL
Water solubility:	at 68 °F: completely miscible
Partition coefficient: n-octanol/water:	No data available
Auto-ignition temperature:	No data available
Thermal decomposition:	No data available
Additional information:	No data available

## 10. Stability and reactivity

Reactivity:	May be corrosive to metals. Formation of hydrogen (Danger of explosion).
Chemical stability:	Stable under recommended storage conditions.
Possibility of hazardous reactions	No hazardous reaction when handled and stored according to provisions.
Conditions to avoid:	Keep away from heat.



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Incompatible materials: Alkali metals, alkali compounds, ammonia, alkalis, alkaline earth metals, alkaline earth compounds, acids, halogenates, organic solvents, permanganates.

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

Thermal decomposition: No data available

## 11. Toxicological information

### Toxicological tests

Toxicological effects: The statements are derived from the properties of the single components. No toxicological data is available for the product as such.

Acute toxicity (oral): Lack of data.

Acute toxicity (dermal): Lack of data.

Acute toxicity (inhalative): Lack of data.

Skin corrosion/irritation: Skin Irritation - Category 2 = Causes skin irritation.

Serious eye damage/irritation: Eye Irritation - Category 2A = Causes serious eye irritation.

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.

Other information: Chronic toxicity carcinogenic effect:

Information about Sulfuric acid:

IARC Rating: Group 1

OSHA Carcinogen: not listed

NTP Rating: listed

### Symptoms

A corrosive effect cannot be ruled out because of the pH value. May cause respiratory irritation.

## 12. Ecological information

### Ecotoxicity

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

### Mobility in soil

No data available

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### Persistence and degradability

Further details: No data available

### Additional ecological information

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

## 13. Disposal considerations

### Product

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

### Contaminated packaging

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

## 14. Transport information

### USA: Department of Transportation (DOT)

Identification number: UN3264  
Proper shipping name: UN 3264, CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S.  
(Sulphuric acid), mixture  
Hazard class or Division: 8  
Packing Group: III  
Labels: 8  
Symbols: G  
Special provisions: IB3, T7, TP1, TP28  
Packaging – Exceptions: 154  
Packaging – Non-bulk: 203  
Packaging – Bulk: 241  
Quantity limitations – Passenger aircraft / rail: 5 L  
Quantity limitations – Cargo only: 60 L  
Vessel stowage – Location: A  
Vessel stowage – Other: 40





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### Sea transport (IMDG)

UN number: UN 3264  
Proper shipping name: UN 3264, CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Sulphuric acid), mixture  
Class or division, Subsidiary risk: Class 8, Subrisk -  
Packing Group: III  
EmS: F-A, S-B  
Special provisions: 223, 274  
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: T7  
Tank instructions - Provisions: TP1, TP28  
Stowage and handling: Category A. SW2  
Properties and observations: Causes burns to skin, eyes and mucous membranes.  
Marine pollutant: no  
Segregation group: 1

### Air transport (IATA)

UN/ID number: UN 3264  
Proper shipping name: UN 3264, CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (Sulphuric acid), mixture  
Class or division, Subsidiary risk: Class 8  
Packing Group: III  
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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### 15. Regulatory information

#### National regulations - U.S. Federal Regulations

Sulfuric acid: TSCA Inventory: listed  
TSCA HPVC: not listed  
Carcinogen Status:  
IARC Rating: Group 1  
OSHA Carcinogen: not listed  
NTP Rating: listed  
Clean Water Act:  
Hazardous Substances: RQ 1000 lbs.  
Other Environmental Laws:  
CERCLA: RQ 1000 lbs.  
SARA Title III Section 302, EHS: TPQ 1000 lbs. / RQ 1000 lbs.  
SARA Title III Section 313, Toxic Release: Conc. 1.0% / Threshold Standard  
NIOSH Recommendations:  
Occupational Health Guideline: 0577

Dodecan-1-ol, ethoxylated: TSCA Inventory: listed; EPA flags XU  
TSCA HPVC: not listed

#### National regulations - U.S. State Regulations

Sulfuric acid: California Proposition 65:  
cancer

#### National regulations - Great Britain

Hazchem-Code: 2X

### 16. Other information

Text for labeling: Contains < 2 % Sulfuric acid, < 1 % Dodecan-1-ol, ethoxylated. Safety data sheet available on request.

Hazard rating systems:



NFPA Hazard Rating:

Health: 1 (Slight)  
Fire: 0 (Minimal)  
Reactivity: 1 (Slight)

HMIS Version III Rating:

Health: 1 (Slight)  
Flammability: 0 (Minimal)  
Physical Hazard: 1 (Slight)  
Personal Protection: X = Consult your supervisor

HEALTH	1
FLAMMABILITY	0
PHYSICAL HAZARD	1
	X

Reason of change: ADR/RID 2019

Date of first version: 2/7/2008

#### Department issuing data sheet

Contact person: see section 1: Dept. responsible for information

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.