

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

1.1 Product identifier

Trade name: G6PDH Reagent R2

As part of the kits: 1 7900 XX XX 026
(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: DE-65558 Holzheim

WWW: <http://www.diasys.de>

E-mail: 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

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)

Acute Tox. 4; H302	Harmful if swallowed.
Acute Tox. 3; H311	Toxic in contact with skin.
Aquatic Chronic 2; H411	Toxic to aquatic life with long lasting effects.
(EUH032)	Contact with acids liberates very toxic gas.

2.2 Label elements

Labelling (CLP)



Signal word: **Danger**

Hazard statements:	H302	Harmful if swallowed.
	H311	Toxic in contact with skin.
	H411	Toxic to aquatic life with long lasting effects.
	EUH032	Contact with acids liberates very toxic gas.
Precautionary statements:	P264	Wash hands and face thoroughly after handling.
	P273	Avoid release to the environment.
	P280	Wear protective gloves/protective clothing/eye protection.
	P312	Call a POISON CENTER/doctor if you feel unwell.
	P361+P364	Take off immediately all contaminated clothing and wash it before reuse.
	P391	Collect spillage.

Special labelling

EUH208 Contains Maleimide. May produce an allergic reaction.

Text for labelling: Contains Sodium azide

2.3 Other hazards

No risks worthy of mention.

Endocrine disrupting properties, Results of PBT and vPvB assessment:

The product does not contain any as PBT or vPvB classified substances.

SECTION 3: Composition/information on ingredients

3.1 Substances: not applicable

3.2 Mixtures

Chemical characterisation: lyophilisate

Hazardous ingredients:

Identifiers	Designation Classification	Content
EC No. 247-852-1 CAS 26628-22-8	Sodium azide Acute Tox. 2; H300. Acute Tox. 1; H310. Acute Tox. 2; H330. STOT RE 2; H373. Aquatic Acute 1; H400. Aquatic Chronic 1; H410. (EUH032).	< 10 %
EC No. 208-787-4 CAS 541-59-3	Maleimide Acute Tox. 2; H300. Skin Corr. 1B; H314. Skin Sens. 1; H317.	< 1 %

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

SECTION 4: First aid measures

4.1 Description of first aid measures

General information: If medical advice is needed, have product container or label at hand.

In case of inhalation: If breathing is difficult, remove victim to fresh air and keep at rest in a position comfortable for breathing. Seek medical attention if problems persist.

Following skin contact: Take off contaminated clothing and wash it before reuse. Remove residues with water.
In case of skin reactions, consult a physician.

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 consult an ophthalmologist.

After swallowing: Rinse mouth thoroughly with water. Have victim drink large quantities of water, with active charcoal if possible. Immediately get medical attention. Never give anything by mouth to an unconscious person.

4.2 Most important symptoms and effects, both acute and delayed

Harmful if swallowed. Toxic in contact with skin.

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: Water mist, extinguishing powder, foam carbon dioxide.

Extinguishing media which must not be used for safety reasons:

Full water jet

5.2 Special hazards arising from the substance or mixture

May form dangerous gases and vapours in case of fire.

Furthermore, there may develop: nitrous fumes, nitrogen oxides (NO_x), carbon monoxide and carbon dioxide.

5.3 Advice for firefighters

Special protective equipment for firefighters:

Wear a self-contained breathing apparatus and chemical protective clothing.

Additional information:

Use fine water spray to cool endangered containers. Fire residuals and contaminated extinguishing water must be disposed of in accordance with the regulations of the local authorities.

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

SECTION 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

Avoid generation of dust. Do not breathe dust. Avoid contact with the substance.

If possible, eliminate leakage. Provide adequate ventilation.

Wear appropriate protective equipment. Take off contaminated clothing and wash it before reuse.

Keep unprotected people away.

6.2 Environmental precautions

Do not allow to penetrate into soil, waterbodies or drains.

If necessary notify appropriate authorities.

6.3 Methods and material for containment and cleaning 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. Wash spill area with plenty of water.

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, and local exhaust as needed. Avoid generation of dust. Do not breathe dust. Do not get in eyes, on skin, or on clothing. Wear appropriate protective equipment. Take off contaminated clothing and wash it before reuse.

Do not eat, drink or smoke when using this product. Wash hands thoroughly after handling.

Have eye wash bottle or eye rinse ready at work place.

When handling large quantities, supply emergency spray.

7.2 Conditions for safe storage, including any incompatibilities

Requirements for storerooms and containers:

Keep container tightly closed and in a well-ventilated place.

Keep container dry. Keep only in the original container.

Protect from heat and direct sunlight.

Store containers in upright position.

Keep containers tightly closed and at a temperature between 2 °C and 8 °C.

Hints on joint storage:

Do not store together with: Dichloromethane, sodium azide, dimethylsulfoxide (DMSO), Sulfuric acid.

Keep away from food, drink and animal feedingstuffs.

Storage class:

6.1C = Combustible substances of acute toxicity, category 3 / hazardous substances that are toxic or produce chronic effects

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
26628-22-8	Sodium azide	Europe: IOELV: STEL	0,3 mg/m ³ (may be absorbed through the skin)
		Europe: IOELV: TWA	0,1 mg/m ³ (may be absorbed through the skin)
		Germany: TRGS 900 Kurzzeit	0,4 mg/m ³ (inhalable fraction)
		Germany: TRGS 900 Langzeit	0,2 mg/m ³ (inhalable fraction)

8.2 Exposure controls

Provide good ventilation and/or an exhaust system in the work area.

Personal protection equipment

Occupational exposure controls

Respiratory protection: Respiratory protection must be worn whenever the WEL levels have been exceeded. The filter class must be suitable for the maximum contaminant concentration (gas/vapour/aerosol/particulates) that may arise when handling the product.

Hand protection: Protective gloves according to EN 374. 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:

Avoid generation of dust. Do not breathe dust. Do not get in eyes, on skin, or on clothing. When using do not eat, drink or smoke. Contaminated work clothing should not be allowed out of the workplace.

Wash hands thoroughly after handling. Take off contaminated clothing and wash it before reuse. Have eye wash bottle or eye rinse ready at work place.

When handling large quantities, supply emergency spray.

Environmental exposure controls

Refer to "6.2 Environmental precautions".

SECTION 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Physical state at 20 °C and 101.3 kPa	solid
	Form: Lyophilized powder
Colour:	white
Odour:	No characteristic odour
Odour threshold:	No data available
Melting point/freezing point:	Not determined
Initial boiling point and boiling range:	Not determined
Flammability:	No data available
Upper/lower flammability or explosive limits:	LEL (Lower Explosion Limit): Not determined UEL (Upper Explosive Limit): Not determined
Flash point/flash point range:	Not applicable
Decomposition temperature:	No data available
pH:	Not determined

Viscosity, dynamic:	Not determined
Solubility:	Not determined
Water solubility:	Not determined
Partition coefficient: n-octanol/water:	Not determined
Vapour pressure:	Not determined
Density:	Not determined
Vapour density:	Not determined
Particle characteristics:	No data available

9.2 Other information

Explosive properties:	Not determined
Oxidizing characteristics:	Not determined
Auto-ignition temperature:	Not determined
Evaporation rate:	Not determined
Additional information:	No data available

SECTION 10: Stability and reactivity

10.1 Reactivity

Refer to subsection "Possibility of hazardous reactions".

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

Contact with acids liberates very toxic gas.

Formation of explosive mixtures with: Dichloromethane, sodium azide, dimethylsulfoxide (DMSO), sulphuric acid.

10.4 Conditions to avoid

Keep away from heat sources, sparks and open flames.

Protect from moisture contamination.

10.5 Incompatible materials

Dichloromethane, sodium azide, dimethylsulfoxide (DMSO), sulphuric acid.

10.6 Hazardous decomposition products

No decomposition when used properly.

Thermal decomposition:	No data available
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SECTION 11: Toxicological information

11.1 Information on hazard classes as defined in Regulation (EC) No 1272/2008

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): Acute Tox. 4; H302 = Harmful if swallowed.
ATEmix (calculated): 575,1 mg/kg

Acute toxicity (dermal): Acute Tox. 3; H311 = Toxic in contact with skin.
ATEmix (calculated): 644,1 mg/kg

Acute toxicity (inhalative): Based on available data, the classification criteria are not met.
ATEmix (calculated): > 5 mg/L/4h (Dusts)

Skin corrosion/irritation: Based on available data, the classification criteria are not met.

Serious eye damage/irritation: Based on available data, the classification criteria are not met.

Sensitisation to the respiratory tract: Based on available data, the classification criteria are not met.

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

Germ cell mutagenicity/Genotoxicity: Based on available data, the classification criteria are not met.

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

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

Effects on or via lactation: Lack of data.

Specific target organ toxicity (single exposure): Based on available data, the classification criteria are not met.

Specific target organ toxicity (repeated exposure): Based on available data, the classification criteria are not met.

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

11.2 Information on other hazards

Endocrine disrupting properties: No data available

Other information: Information about Sodium azide:
LD50, Rat, oral: 27 mg/kg
LD50, Rabbit, dermal: 20 mg/kg
LC50, Rat, inhalative: 0,05 - 0,6 mg/L/4h (Dusts)

Information about Maleimide:
LD50, Rat, oral: 7,76 mg/kg

After resorption of toxic quantities: headache, dizziness, nausea, cough, vomiting, spasms, breathing paralysis, CNS disorders, low blood pressure, cardiovascular failure, unconsciousness, collapse.

SECTION 12: Ecological information

12.1 Toxicity

Aquatic toxicity: Toxic to aquatic life with long lasting effects.

Information about Sodium azide:
Very toxic to aquatic life with long lasting effects.
Even if strongly diluted, toxic water compounds develop.

Fish toxicity:
LC50 Oncorhynchus mykiss: 2,75 mg/L/96h (OECD 203)

Daphnia toxicity:
EC50 Daphnia pulex: 4,2 mg/L/48h

Algae toxicity:
EC50 Pseudokirchneriella subcapitata (green algae): 0,35 mg/L/96h (OECD 201)



SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH) and Regulation (EU) No 2020/878

G6PDH Reagent R2

Material number 1 7900 99 10 026 R2

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Version: 1.1

Replaces version: 1.0

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Water Hazard Class: 2 = obviously hazardous to water

12.2 Persistence and degradability

Further details: No data available

12.3 Bioaccumulative potential

Partition coefficient: n-octanol/water:

Not determined

12.4 Mobility in soil

No data available

12.5 Results of PBT and vPvB assessment

The product does not contain any as PBT or vPvB classified substances.

12.6 Endocrine disrupting properties

No data available

12.7 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.

Package

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 or ID number

ADR/RID, ADN, IMDG, IATA-DGR:

UN 3288

14.2 UN proper shipping name

ADR/RID, ADN, IMDG, IATA-DGR:

UN 3288, TOXIC SOLID, INORGANIC, N.O.S. (Sodium azide)

14.3 Transport hazard class(es)

ADR/RID, ADN: Class 6.1, Code: T5
IMDG: Class 6.1, Subrisk -
IATA-DGR: Class 6.1

14.4 Packing group

ADR/RID: III

14.5 Environmental hazards

Dangerous for the environment: Substance/mixture is environmentally hazardous according to the criteria of the UN model regulations.

Marine pollutant - IMDG: yes

Marine pollutant - ADN: yes

14.6 Special precautions for user

Land transport (ADR/RID)

Warning board: ADR/RID: Kemmler-number 60, UN number UN 3288
Hazard label: 6.1
Special Provisions: 274
Limited quantities: 5 kg
EQ: E1
Package - Instructions: P002 IBC08 LP02 R001
Package - Special Provisions: B3
Special provisions for packing together: MP10
Portable tanks - Instructions: T1
Portable tanks - Special Provisions: TP33
Tank coding: SGAH L4BH
Tunnel restriction code: E

Inland waterway craft (ADN)

Hazard label: 6.1
Special Provisions: 274 802
Limited quantities: 5 kg
EQ: E1
Equipment necessary: PP - EP

Sea transport (IMDG)

EmS: F-A, S-A
Special Provisions: 223 274
Limited quantities: 5 kg
Excepted quantities: E1
Package - Instructions: P002, LP02
Package - Provisions: -
IBC - Instructions: IBC08
IBC - Provisions: B3
Tank instructions - IMO: -
Tank instructions - UN: T1
Tank instructions - Provisions: TP33
Stowage and handling: Category A.
Properties and observations: Toxic if swallowed, by skin contact or by inhalation.
Segregation group: none



Air transport (IATA)

Hazard label:	Toxic
Excepted Quantity Code:	E1
Passenger and Cargo Aircraft: Ltd.Qty.:	Pack.Instr. Y645 - Max. Net Qty/Pkg. 10 kg
Passenger and Cargo Aircraft:	Pack.Instr. 670 - Max. Net Qty/Pkg. 100 kg
Cargo Aircraft only:	Pack.Instr. 677 - Max. Net Qty/Pkg. 200 kg
Special Provisions:	A3 A5
Emergency Response Guide-Code (ERG):	6L

14.7 Maritime transport in bulk according to IMO instruments

No data available

SECTION 15: Regulatory information**15.1 Safety, health and environmental regulations/legislation specific for the substance or mixture****National regulations - Germany**

Storage class:	6.1C = Combustible substances of acute toxicity, category 3 / hazardous substances that are toxic or produce chronic effects
Water Hazard Class:	2 = obviously hazardous to water
Incident regulation:	Richtlinie 2012/18/EU (Seveso III): Umweltgefahren: Ziffer 1.3.2 = Code E2, Mengenschwelle 200 000kg / 500 000kg
Information on working limitations:	Observe employment restrictions for young people.
Further regulations, limitations and legal requirements:	No data available

National regulations - EC member states

Further regulations, limitations and legal requirements:	Directive 2012/18/EU on the control of major-accident hazards involving dangerous substances [Seveso-III-Directive] refer to Germany, 12. BImSchV Use restriction according to REACH annex XVII, no.: 3, 75
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15.2 Chemical Safety Assessment

For this mixture a chemical safety assessment is not required.

SECTION 16: Other information

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

H300 = Fatal if swallowed.
H302 = Harmful if swallowed.
H310 = Fatal in contact with skin.
H311 = Toxic in contact with skin.
H314 = Causes severe skin burns and eye damage.
H317 = May cause an allergic skin reaction.
H330 = Fatal if inhaled.
H373 = May cause damage to organs through prolonged or repeated exposure.
H400 = Very toxic to aquatic life.
H410 = Very toxic to aquatic life with long lasting effects.
H411 = Toxic to aquatic life with long lasting effects.
EUH032 = Contact with acids liberates very toxic gas.
EUH208 = Contains Maleimide. May produce an allergic reaction.

Reason of change: General revision

Date of first version: 27.4.2022

Department issuing data sheet: see section 1: Department responsible for information

SAFETY DATA SHEET

according to Regulation (EC) No. 1907/2006 (REACH) and Regulation (EU) No 2020/878

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Abbreviations and acronyms:

- Acute Tox.: Acute toxicity
- ADN: European Agreement concerning the International Carriage of Dangerous Goods by Inland Waterways
- ADR: European Agreement concerning the International Carriage of Dangerous Goods by Road
- Aquatic Acute: Hazardous to the aquatic environment - acute
- Aquatic Chronic: Hazardous to the aquatic environment - chronic
- AS/NZS: Australian Standards/New Zealand Standards
- CAS: Chemical Abstracts Service
- CFR: Code of Federal Regulations
- CLP: Classification, Labelling and Packaging
- CNS: Central Nervous System
- DMEL: Derived minimal effect level
- DNEL: Derived no-effect level
- EC: European Community
- EC50: Effective Concentration 50%
- EN: European Standard
- EQ: Excepted quantities
- EU: European Union
- IATA: International Air Transport Association
- IATA-DGR: International Air Transport Association – Dangerous Goods Regulations
- IBC Code: International Code for the Construction and Equipment of Ships carrying Dangerous Chemicals in Bulk
- IMDG Code: International Maritime Dangerous Goods Code
- LC50: Median lethal concentration
- LD50: Lethal dose 50%
- LEL: Lower Explosion Limit
- MARPOL: Maritime Pollution: The International Convention for the Prevention of Pollution from Ships
- OECD: Organisation for Economic Co-operation and Development
- OEL: Occupational Exposure Limit Value
- OSHA: Occupational Safety and Health Administration
- PBT: Persistent, bioaccumulative and toxic
- PNEC: Predicted no-effect concentration
- REACH: Registration, Evaluation, Authorisation and Restriction of Chemicals
- RID: Regulations Concerning the International Carriage of Dangerous Goods by Rail
- Skin Corr.: Skin corrosion
- Skin Sens.: Skin sensitisation
- STOT RE: Specific target organ toxicity - repeated exposure
- TLV: Threshold Limit Value
- TRGS: Technical Rules for Hazardous Substances
- UN: United Nations
- vPvB: Very persistent and very bioaccumulative
- WEL: Workplace Exposure Limit

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.