



# SAFETY DATA SHEET

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

## Erytype S AB

Material number 186016

Revision date: 5/31/2017

Version: 2

Language: en-US, CA

Date of print: 12/13/2017

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## 1. Product and company identification

### Product identifier

Trade name: Erytype S AB  
This safety data sheet pertains to the following products:  
806127100 Erytype S ABD Rev. A1,B  
806130100 Erytype S AB0 Donor

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

General use: diagnostic agent in microtiter plate.  
Use as laboratory reagent.  
Only for industrial users.

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

Company name: Bio-Rad Medical Diagnostics GmbH  
Street/POB-No.: Industriestr. 1  
Postal Code, city: 63303 Dreieich  
Germany  
WWW: [www.medizinische-diagnostik-dreieich.de](http://www.medizinische-diagnostik-dreieich.de)  
E-mail: [contact.bmd@bio-rad.com](mailto:contact.bmd@bio-rad.com)  
Telephone: +49 (0)6103-3130-0  
Telefax: +49 (0)6103-3130-646  
Dept. responsible for information:  
Produktmanagement Transfusion  
Telephone: 06103 3130-611  
Telefax: 06103 3130-724

### Emergency phone number

GIZ-Nord, Göttingen, Germany,  
Telephone: +49 551-19240

## 2. Hazards identification

### Emergency overview

Appearance: Physical state at 68 °F and 101.3 kPa: solid  
Form: solid  
Color: colorless or colored  
Odor: odorless  
Classification: This material is classified as not hazardous.  
Additional information: If handled and used properly, exposure from the product is unlikely.  
Take care that activity is executed only by specialists or authorised personnel.

### Regulatory status

This material is not considered hazardous by the U.S. OSHA Hazard Communication Standard (29 CFR 1910.1200) and SIMDUT in Canada.

### Hazards not otherwise classified

see section 11: Toxicological information



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### 3. Composition / Information on ingredients

Relevant ingredients:

CAS No.	Designation	Content	Classification
CAS 1934-21-0	Trisodium-5-hydroxy-1-(4-sulphophenyl)-4-(4-sulphophenylazo)pyrazole-3-carboxylate	< 2 %	Respiratory Sensitizer - Category 1. Sensitization - skin - Category 1.
CAS 26628-22-8	Sodium azide	< 2 %	Acute Toxicity - oral - Category 2. Aquatic toxicity - acute - Category 1. Aquatic toxicity - chronic - Category 1.

Additional information: Microtiter plate, coated.

If handled and used properly, exposure from the product is unlikely.

Take care that activity is executed only by specialists or authorised personnel.

In aqueous solution:

Preparation does not contain dangerous substances above limits that need to be mentioned in this section according to applicable legislation.

### 4. First aid measures

In case of inhalation: Provide fresh air. Seek medical treatment in case of troubles.

Following skin contact: Remove residues with water. Remove contact lenses, if present and easy to do. Continue rinsing. Change contaminated clothing. 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. In case of eye irritation consult an ophthalmologist.

After swallowing: Rinse mouth and drink large quantities of water.

Induce vomiting when the affected person is not unconscious. Observe risk of aspiration if vomiting occurs.

Immediately get medical attention. Never give anything by mouth to an unconscious person.

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

No data available

#### Information to physician

Treat symptomatically.

### 5. Fire fighting measures

Flash point/flash point range:

Not applicable

Auto-ignition temperature: No data available

Suitable extinguishing media:

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

#### Specific hazards arising from the chemical

In case of fire may be liberated: styrene, carbon monoxide and carbon dioxide.

Protective equipment and precautions for firefighters:

Wear self-contained breathing apparatus. Wear appropriate protective equipment.



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

## 6. Accidental release measures

Personal precautions: Avoid contact with the substance. Provide adequate ventilation. Wear personal protection equipment.

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

Methods for clean-up: Take up mechanically, placing in appropriate containers for disposal. Final cleaning.

## 7. Handling and storage

### Handling

Advices on safe handling: Avoid contact with skin and eyes. Wear appropriate protective equipment. Keep all containers, equipment and working place clean. Provide adequate ventilation, and local exhaust as needed. Take off contaminated clothing and wash it before reuse. Take care that activity is executed only by specialists or authorised personnel.

### Storage

Requirements for storerooms and containers:

Keep only in the original container. Keep containers tightly closed and at a temperature between 35.6 °F and 46.4 °F.

Hints on joint storage: Do not store together with acids/alkalies and oxidation agents.

## 8. Exposure controls / personal protection

### Exposure guidelines

Occupational exposure limit values:

CAS No.	Designation	Type	Limit value
26628-22-8	Sodium azide	ACGIH: Ceiling	0.11 ppm (as Hydrazoic acid vapour)
		ACGIH: Ceiling	0.29 mg/m <sup>3</sup> (as Sodium azide)
		Canada, Alberta: OEL Ceiling	0.29 mg/m <sup>3</sup> (as Hydrazoic acid vapour)
		Canada, Alberta: OEL Ceiling	0.3 mg/m <sup>3</sup> ; 0.11 ppm (as Hydrazoic acid vapour)
		Canada, BC: OEL Ceiling	0.11 ppm (as Hydrazoic acid vapour)
		Canada, BC: OEL Ceiling	0.29 mg/m <sup>3</sup> (as Sodium azide)
		Canada, Québec: Plafond	0.3 mg/m <sup>3</sup> ; 0.11 ppm
		NIOSH: Ceiling	0.1 ppm (as HN <sub>3</sub> ; may be absorbed through the skin)
		NIOSH: Ceiling	0.3 mg/m <sup>3</sup> (as NaN <sub>3</sub> ; may be absorbed through the skin)
		NIOSH: Ceiling	0.3 mg/m <sup>3</sup> (as NaN <sub>3</sub> ; may be absorbed through the skin)

### Engineering controls

Provide good ventilation and/or an exhaust system in the work area.  
Take care that activity is executed only by specialists or authorised personnel.  
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. Particulates filter N100 according to OSHA Standard - 29 CFR: 1910.134 or ANSI Z88.2. The filter class must be suitable for the maximum contaminant concentration (gas/vapor/aerosol/particulates) that may arise when handling the product.
General hygiene considerations:	Avoid contact with skin and eyes. Take off contaminated clothing and wash it before reuse. After work, wash hands and face.

## 9. Physical and chemical properties

### Information on basic physical and chemical properties

Appearance:	Physical state at 68 °F and 101.3 kPa: solid Form: solid Color: colorless or colored
Odor:	odorless
Odor threshold:	No data available
pH value:	not applicable
Melting point/freezing point:	No data available
Initial boiling point and boiling range:	No data available
Flash point/flash point range:	Not applicable
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:	No data available
Solubility:	soluble in Ethanol (Coating agent)
Water solubility:	soluble (Coating agent)
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:	No data available
Chemical stability:	Stable under recommended storage conditions.



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Possibility of hazardous reactions

No hazardous reactions known.

Conditions to avoid:

Protect against heat /sun rays.

Incompatible materials:

Strong oxidizing agents, strong acids and alkalis.

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): Data technically impossible to obtain.

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: Data technically impossible to obtain.

Skin sensitisation: Data technically impossible to obtain.

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

May be harmful if swallowed.

May cause an allergic skin reaction.

May cause allergy or asthma symptoms or breathing difficulties if inhaled.

### General remarks

If handled and used properly, exposure from the product is unlikely.

In aqueous solution:

Preparation does not contain dangerous substances above limits that need to be mentioned in this section according to applicable legislation.

Information about sodium azide:

LD50 Rat, oral: 27 mg/kg

LD50 Rabbit, dermal: 20 mg/kg

LC50 Rat, inhalative: 37 mg/m<sup>3</sup>



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## 12. Ecological information

### Ecotoxicity

Aquatic toxicity: Harmful to aquatic life with long lasting effects.  
sodium azide: Very toxic to aquatic organisms.

### Mobility in soil

No data available

### Persistence and degradability

Further details: No data available

### Additional ecological information

General information: Do not allow to penetrate into soil, waterbodies 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.  
Handle contaminated packages in the same way as the substance itself.  
Non-contaminated packages may be recycled.

## 14. Transport information

### USA: Department of Transportation (DOT)

Proper shipping name: Not restricted

### Canada: Transportation of Dangerous Goods (TDG)

Shipping name: Not restricted

### Sea transport (IMDG)

Proper shipping name: Not restricted

Marine pollutant: no

### Air transport (IATA)

Proper shipping name: Not restricted

### Further information

No dangerous good in sense of these transport regulations.



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### 15. Regulatory information

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

Protein:

TSCA Inventory: listed; UVCB; EPA flags XU  
TSCA HPVC: not listed

Methylcellulose:

TSCA Inventory: listed; EPA flags XU  
TSCA HPVC: not listed

C.I. Food Blue 5:

TSCA Inventory: not listed

Trisodium-5-hydroxy-1-(4-sulphophenyl)-4-(4-sulphophenylazo)  
pyrazole-3-carboxylate:

TSCA Inventory: listed  
TSCA HPVC: not listed

Trisodium

TSCA Inventory: listed

tris[5,6-dihydro-5-(hydroxyimino)-6-oxonaphthalene-2-sulphonato  
(2-)-N5,O6]ferrate(3-):

TSCA HPVC: not listed

Sodium azide:

TSCA Inventory: listed  
TSCA HPVC: not listed  
Other Environmental Laws:  
CERCLA: RQ 1000 lbs.  
RCRA Hazardous Wastes: Code P105  
SARA Title III Section 302, EHS: TPQ 500  
lbs. / RQ 1000 lbs.  
SARA Title III Section 313, Toxic Release:  
Conc. 1.0% / Threshold Standard  
NIOSH Recommendations:  
Current Intelligence Bulletin: 78-127  
Occupational Health Guideline: 0560

#### National regulations - Canada

No data available

### 16. Other information

Text for labeling: Contains Sodium azide,  
Trisodium-5-hydroxy-1-(4-sulphophenyl)-4-(4-sulphophenylazo)pyrazole-3-carboxylate.

Reason of change: General revision

Date of first version: 4/29/2015

#### 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.