Version 03 Revision: 05.05.2017

# Useable for:

BA E-2100 Glycine ELISA

Single components with dangerous ingredients:REF: BA E-0080Stop SolutionREF: BA E-2129Reducing Concentrate

STOP-SOLN RED-CONC 100x

Not listed single components contain no hazardous substances in concentrations to be declared, a labelling is not required.

# **1** Identification of the substance/mixture and of the company/undertaking

# 1.1 Product identifier

| Trade name:     |  |  |  |
|-----------------|--|--|--|
| Article number: |  |  |  |

<u>Stop Solution</u> BA E-0080 STOP-SOLN

**1.2** *Relevant identified uses of the substance or mixture and uses advised against Identified uses: laboratory reagent / Immunoassay The product is intended for professional use.* 

# 1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier: Labor Diagnostika Nord GmbH & Co. KG Am Eichenhain 1 48531 Nordhorn, Germany Phone +49 5921 8197 200 Fax +49 5921 8197 201 Email support@ldn.de

**1.4 Emergency telephone number** +49 5921 8197 200

# 2 Hazards identification

# 2.1 Classification of the substance or mixture Classification (REGULATION (EC) No 1272/2008) Corrosive to metals, Category 1, H290

For the full text of the H-Statements mentioned in this Section, see Section 16.

# 2.2 Label elements Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms:



Hazard statements: H290 May be corrosive to metals. Signal word: Warning

# 2.3 Other hazards

None known.

# 3 Composition/information on ingredients

# 3.1 Substance

Not applicable.

According to Regulation (EC). No. 1907/2006/EC Version 03 Revision: 05.05.2017

# 3.2 Mixture

# Hazardous components (REGULATION (EC) No 1272/2008)

CAS: 7664-93-9 sulphuric acid H290; H314 ≥ 1 % - < 5 %

# Additional information

For the full text of the H-Statements mentioned in this Section, see Section 16.

# 4 First aid measures

# 4.1 First aid measures

After inhalation: fresh air.

After skin contact: wash off with plenty of water. Remove contaminated clothing. After eye contact: rinse out with plenty of water with the eyelid held wide open. Call in ophthalmologist if necessary.

After swallowing: drink water (two glasses at most). Consult doctor if feeling unwell.

- **4.2** *Most important symptoms and effects, both acute and delayed irritant effects.*
- **4.3 Indication of any immediate medical attention and special treatment needed** *No information available.*

# 5 Firefighting measures

# 5.1 Extinguishing media

Suitable extinguishing media Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Unsuitable extinguishing media For this substance/mixture no limitations of extinguishing agents are given.

# 5.2 Special hazards arising from the substance or mixture

*Not combustible. Ambient fire may liberate hazardous vapours.* 

# 5.3 Advice for firefighters

*Special protective equipment for firefighters In the event of fire, wear self-contained breathing apparatus.* 

# 6 Accidental release measures

# 6.1 Personal precautions, protective equipment and emergency procedures

Advice for non-emergency personnel: Do not breathe vapours, aerosols. Evacuate the danger area, observe emergency procedures, consult an expert. Advice for emergency responders: Protective equipment see section 8.

# 6.2 Environmental precautions

No special precautionary measures necessary.

According to Regulation (EC). No. 1907/2006/EC Version 03 Revision: 05.05.2017

# 6.3 Methods and materials for containment and cleaning up

*Observe possible material restrictions! Take up with liquid-absorbent and neutralising material. Dispose of properly. Clean up affected area.* 

# 6.4 Reference to other sections

*Indications about possible material restrictions, see sections 7 and 10 and about waste treatment see section 13.* 

# 7 Handling and storage

**7.1 Precautions for safe handling** Advice on safe handling: Observe label precautions. Hygiene measures:

Change contaminated clothing. Wash hands after working with substance.

# 7.2 Conditions for safe storage, including any incompatibilities

*Storage conditions: Tightly closed and dry.* 

# 7.3 Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

# 8 Exposure controls/personal protection

# 8.1 Control parameters

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

# 8.2 Exposure controls

Engineering measures:

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment. See section 7.1.

Individual protection measures:

General protective and hygienic measures: Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Store protective clothing separately. Avoid contact with the eyes and skin.

Respiratory protection:

In case of good room ventilation, not necessary. In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.

According to Regulation (EC). No. 1907/2006/EC Version 03

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Protection of hands: Protective gloves. Material of gloves: Chemical protection gloves



Chemical protection gloves: Chemical protection gloves are to be selected according to the concentration and quantity of the hazardous substance concentration and quantity in workplace. The glove material has to be impermeable and resistant to the product/ the substance/ the preparation. The protective gloves to be used must comply with the specifications of EC Directive 89/686/EEC and the related standard EN374.

*Eye protection: Tightly sealed goggles* 

Body protection: lab coat

# 9 Physical and chemical properties

# 9.1 Information on basic physical and chemical properties

| Form                                   | liquid                              |
|--|-------------------------------------|
| Colour                                 | colourless                          |
| Odour                                  | odourless                           |
| Odour Threshold                        | Not applicable                      |
| рН                                     | <i>ca. 1.0 at 20 °C</i>             |
| Melting point                          | No information available.           |
| Boiling point/boiling range            | No information available.           |
| Flash point                            | No information available.           |
| Evaporation rate                       | No information available.           |
| Flammability (solid, gas)              | No information available.           |
| Lower explosion limit                  | No information available.           |
| Upper explosion limit                  | No information available.           |
| Vapour pressure                        | No information available.           |
| Relative vapour density                | No information available.           |
| Density                                | ca. 1.02 g/cm <sup>3</sup> at 20 °C |
| Relative density                       | No information available.           |
| Water solubility                       | at 20 °C soluble                    |
| Partition coefficient: n-octanol/water | No information available.           |
| Auto-ignition temperature              | No information available.           |
| Decomposition temperature              | No information available.           |
| Viscosity, dynamic                     | No information available.           |
| Explosive properties                   | Not classified as explosive.        |
| Oxidizing properties                   | none                                |
|  |                                     |

# 9.2 Other data

Corrosion: May be corrosive to metals.

# 10 Stability and reactivity

**10.1 Reactivity** 

See section 10.3.

- **10.2 Chemical stability** The product is chemically stable under standard ambient conditions (room temperature).
- **10.3 Possibility of hazardous reactions** No dangerous reactions known.
- **10.4 Conditions to avoid** No further relevant information available.
- **10.5 Incompatible materials** No further relevant information available.
- **10.6 Hazardous decomposition products** No dangerous decomposition products known.

# 11 Toxicological information

# 11.1 Information on toxicological effects

Acute toxicity: No information available. Primary irritant effect on the skin: Possible damages: slight irritation Primary irritant effect on the eye: Possible damages: slight irritation Sensitization: No sensitizing effects known.

# 11.2 Additional information

On the basis of the morphology of the product, no hazardous properties are to be expected when it is handled and used with appropriate care. Handle in accordance with good industrial hygiene and safety practice.

# 12 Ecological information

# 12.1 Toxicity

No further relevant information available.

# 12.2 Persistence and degradability

No further relevant information available.

# 12.3 Bioaccumulative potential

No further relevant information available.

# Safety Data Sheet According to Regulation (EC). No. 1907/2006/EC Version 03

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# 12.4 Mobility in soil

No further relevant information available.

# 12.5 Results of PBT and vPvB assessment

Substance(s) in the mixture do(es) not meet the criteria for PBT or vPvB according to Regulation (EC) No 1907/2006, Annex XIII, or a PBT/vPvB assessment was not conducted.

# 12.6 Other adverse effects

No further relevant information available.

#### 13 Disposal considerations

# Waste treatment methods

Dispose of packaging according to applicable local, state, and federal regulations. Packaging's that may not be cleansed are to be disposed of in the same manner as the product.

# 14 Transport information

# 14.1 UN No.

UN 3264

# 14.2 UN Proper shipping name

CORROSIVE LIQUID, ACIDIC, INORGANIC, N.O.S. (SULPHURIC ACID SOLUTION)

# 14.3 Class

8

# 14.4 Packing group III

# 14.5 Environmental hazards

no

14.6 Special precautions for user no

# 14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code Not relevant

# 15 Regulatory information

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

<u>EU regulations</u> *Major Accident Hazard: SEVESO III Not applicable Employment restrictions: Observe employment restrictions in accordance with the youth employment protection regulations (94/33 / EC). Substances of very high concern (SVHC) This product does not contain substances of very high concern according to Regulation (EC) No 1907/2006 (REACH).* 

National legislation Storage class: 8B

# 15.2 Chemical Safety Assessment:

For this product a chemical safety assessment was not carried out.

# 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

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

Department issuing SDS: Safety Representative Contact: LDN

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

**1.1 Product identifier** Trade name:

Article number:

<u>Reducing Concentrate</u> BA E-2129

RED-CONC 100x

**1.2 Relevant identified uses of the substance or mixture and uses advised against** Identified uses: laboratory reagent / Immunoassay The product is intended for professional use.

# 1.3 Details of the supplier of the safety data sheet

Manufacturer/Supplier: Labor Diagnostika Nord GmbH & Co. KG Am Eichenhain 1 48531 Nordhorn, Germany Phone +49 5921 8197 200 Fax +49 5921 8197 201 Email support@ldn.de

**1.4 Emergency telephone number** +49 5921 8197 200

# 2 Hazards identification

2.1 Classification of the substance or mixture Classification (REGULATION (EC) No 1272/2008)

Corrosive to metals, Category 1, H290 Acute oral toxicity, Category 3, H301 Skin Corrosion/irritation, Category 1 A, H314 Serious Eye Damage/Eye Irritation, Category 1, H318 Reproductive Toxicity, Category 1B, H360 For the full text of the H-Statements mentioned in this Section, see Section 16.

# 2.2 Label elements

# Labelling (REGULATION (EC) No 1272/2008)

Hazard pictograms:



Hazard statements: H290 May be corrosive to metals. H301 Toxic if swallowed H314 Causes severe skin burns and eye damage H360FD May damage fertility. May damage the unborn child Signal word: Danger Precautionary statements: P201 Obtain special instructions before use P280 Wear protective gloves/ protective clothing/ eye protection/ face protection

According to Regulation (EC). No. 1907/2006/EC Version 03 Revision: 05.05.2017

P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/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 or doctor/ physician

# 2.3 Other hazards

None known.

|     |   | -       | /- /-     |            |             |     |
|-----|---|---------|-----------|------------|-------------|-----|
|     | 3 | Composi | tion/into | rmation or | ingredients | ς.  |
| - 1 |   | composi |           |            | ing carcies | e . |

# 3.1 Substance

Not applicable.

# 3.2 Mixture

# Hazardous components (REGULATION (EC) No 1272/2008)

| CAS: 16940-66-2   | sodium borohydride | 10 - 30 % |
|-------------------|--------------------|-----------|
| CAS: 1310-73-2    | sodium hydroxide   | 10 - 30 % |
| H260, H314, H318, | H301,H360FD        |           |
|                   |                    |           |

# Additional information

For the full text of the H-Statements mentioned in this Section, see Section 16.

# 4 First aid measures

# 4.1 First aid measures

*General Advice: Immediate medical attention is required. Show this safety data sheet to the doctor in attendance.* 

*Eye Contact: Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. In the case of contact with eyes, rinse immediately with plenty of water and seek medical advice.* 

*Skin Contact: Wash off immediately with plenty of water for at least 15 minutes. Immediate medical attention is required* 

Ingestion: Do not induce vomiting. Call a physician or Poison Control Center immediately. Inhalation: If breathing is difficult, give oxygen. Do not use mouth-to-mouth resuscitation if victim ingested or inhaled the substance; induce artificial respiration with a respiratory medical device. Move to fresh air. Immediate medical attention is required. Protection of First-aiders: Use personal protective equipment.

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

*Causes burns by all exposure routes. Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation* 

**4.3 Indication of any immediate medical attention and special treatment needed** *Notes to Physician: Treat symptomatically.* 

# 5 Firefighting measures

# 5.1 Extinguishing media

Suitable extinguishing media Use extinguishing measures that are appropriate to local circumstances and the surrounding environment. Unsuitable extinguishing media No information available.

# 5.2 Special hazards arising from the substance or mixture

*Thermal decomposition can lead to release of irritating gases and vapours. The product causes burns of eyes, skin and mucous membranes. Hazardous Combustion Products:* 

Thermal decomposition can lead to release of irritating gases and vapours.

# 5.3 Advice for firefighters

As in any fire, wear self-contained breathing apparatus pressure-demand, MSHA/NIOSH (approved or equivalent) and full protective gear. Thermal decomposition can lead to release of irritating gases and vapors.

# 6 Accidental release measures

# 6.1 Personal precautions, protective equipment and emergency procedures

*Ensure adequate ventilation. Use personal protective equipment. Keep people away from and upwind of spill/leak. Evacuate personnel to safe areas.* 

# 6.2 Environmental precautions

Should not be released into the environment. Do not flush into surface water or sanitary sewer system. See Section 12 for additional ecological information.

# 6.3 Methods and materials for containment and cleaning up

Soak up with inert absorbent material. Keep in suitable, closed containers for disposal.

# 6.4 Reference to other sections

Refer to protective measures listed in Sections 8 and 13.

# 7 Handling and storage

# 7.1 Precautions for safe handling

Use only under a chemical fume hood. Wear personal protective equipment. Do not get in eyes, on skin, or on clothing. Do not ingest. Do not breathe vapours or spray mist. Do not allow contact with water.

# 7.2 Conditions for safe storage, including any incompatibilities

*Storage conditions: Tightly closed and dry.* 

# 7.3 Specific end use(s)

Use in laboratories

# 8 Exposure controls/personal protection

# 8.1 Control parameters

The product does not contain any relevant quantities of materials with critical values that have to be monitored at the workplace.

# 8.2 Exposure controls

Engineering measures:

Technical measures and appropriate working operations should be given priority over the use of personal protective equipment. See section 7.1.

Individual protection measures:

General protective and hygienic measures: Immediately remove all soiled and contaminated clothing. Wash hands before breaks and at the end of work. Store protective clothing separately. Avoid contact with the eyes and skin.

Respiratory protection:

*In case of good room ventilation, not necessary. In case of brief exposure or low pollution use respiratory filter device. In case of intensive or longer exposure use self-contained respiratory protective device.* 

Protection of hands: Protective gloves. Material of gloves: Chemical protection gloves are to be se quantity of the hazardous substance con



Chemical protection gloves are to be selected according to the concentration and quantity of the hazardous substance concentration and quantity in workplace. The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

The protective gloves to be used must comply with the specifications of EC Directive 89/686/EEC and the related standard EN374.

*Eye protection: Tightly sealed goggles* 



Body protection: lab coat

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# 9 Physical and chemical properties

# 9.1 Information on basic physical and chemical properties

| • •                                    |                                    |
|--|------------------------------------|
| Form                                   | liquid                             |
| Colour                                 | colourless                         |
| Odour                                  | odourless                          |
| Odour Threshold                        | Not applicable                     |
| pН                                     | <i>ca. 14 at 20 °C</i>             |
| Melting point                          | No information available.          |
| Boiling point/boiling range            | 120 - 125 °C / 248 - 257 °F        |
| Flash point                            | No information available.          |
| Evaporation rate                       | No information available.          |
| Flammability (solid, gas)              | No information available.          |
| Lower explosion limit                  | No information available.          |
| Upper explosion limit                  | No information available.          |
| Vapour pressure                        | No information available.          |
| Relative vapour density                | No information available.          |
| Density                                | ca. 1.2 g/cm <sup>3</sup> at 20 °C |
| Relative density                       | No information available.          |
| Water solubility                       | Completely soluble                 |
| Partition coefficient: n-octanol/water | No information available.          |
| Auto-ignition temperature              | No information available.          |
| Decomposition temperature              | No information available.          |
| Viscosity, dynamic                     | 60.43 mPa.s at 20 °C               |
| Explosive properties                   | Not classified as explosive.       |
| Oxidizing properties                   | none                               |
|  |                                    |

# 9.2 Other data

No other data available.

# 10 Stability and reactivity

10.1 Reactivity

See section 10.3.

# 10.2 Chemical stability

The product is chemically stable under standard ambient conditions (room temperature).

# 10.3 Possibility of hazardous reactions

*Hazardous Polymerization: Hazardous polymerization does not occur. Hazardous Reactions: None under normal processing.* 

# 10.4 Conditions to avoid

Incompatible products. Excess heat. Temperatures above 40 °C.

# 10.5 Incompatible materials

Strong oxidizing agents.

# 10.6 Hazardous decomposition products

Thermal decomposition can lead to release of irritating gases and vapours.

# **11** Toxicological information

# 11.1 Information on toxicological effects

Acute toxicity:

*Oral:* Category 3, ATE = 285 mg/kg Dermal: Based on available data, the classification criteria are not met Inhalation: Based on available data, the classification criteria are not met skin corrosion/irritation: Category 1 A

serious eye damage/irritation: Category 1 reproductive toxicity: Category 1B

# 11.2 Additional information

Other Adverse Effects:

See actual entry in RTECS for complete information The toxicological properties have not been fully investigated.

Symptoms / effects, both acute and delayed:

*Product is a corrosive material. Use of gastric lavage or emesis is contraindicated. Possible perforation of stomach or esophagus should be investigated: Ingestion causes severe swelling, severe damage to the delicate tissue and danger of perforation* 

# 12 **Ecological information**

# 12.1 Toxicity

No further relevant information available.

12.2 Persistence and degradability

No further relevant information available.

# 12.3 Bioaccumulative potential

No further relevant information available.

# 12.4 Mobility in soil

No further relevant information available.

# 12.5 Results of PBT and vPvB assessment

Substance(s) in the mixture do(es) not meet the criteria for PBT or vPvB according to Regulation (EC) No 1907/2006, Annex XIII, or a PBT/vPvB assessment was not conducted.

# 12.6 Other adverse effects

No further relevant information available.

# 13 Disposal considerations

# Waste treatment methods

Dispose of packaging according to applicable local, state, and federal regulations. Packaging's that may not be cleansed are to be disposed of in the same manner as the product.

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# 14 Transport information

14.1 UN No.

UN 3320

- **14.2 UN Proper shipping name** Sodium borohydride and sodium hydroxide solution
- 14.3 Class

8

- **14.4 Packing group** II
- **14.5 Environmental hazards** no
- **14.6 Special precautions for user** yes
- **14.7 Transport in bulk according to Annex II of MARPOL 73/78 and the IBC Code** Not relevant

# 15 Regulatory information

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

*Take note of Control of Substances Hazardous to Health Regulations (COSHH) 2002 and 2005 Amendment.* 

Take note of Dir 94/33/EC on the protection of young people at work.

Take note of Dir 92/85/EC on the protection of pregnant and breastfeeding women at work. Take note of Directive 98/24/EC on the protection of the health and safety of workers from the risks related to chemical agents at work.

National legislation

*Storage class:* 8

# 15.2 Chemical Safety Assessment:

Chemical Safety Assessment/Reports (CSA/CSR) are not required for mixtures.

# 16 Other information

This information is based on our present knowledge. However, this shall not constitute a guarantee for any specific product features and shall not establish a legally valid contractual relationship.

Relevant phrases H290 May be corrosive to metals. H301 Toxic if swallowed H314 Causes severe skin burns and eye damage H360FD May damage fertility. May damage the unborn child Precautionary statements: P201 Obtain special instructions before use P280 Wear protective gloves/ protective clothing/ eye protection/ face protection P301 + P330 + P331 IF SWALLOWED: Rinse mouth. Do NOT induce vomiting P303 + P361 + P353 IF ON SKIN (or hair): Remove/ Take off immediately all contaminated clothing. Rinse skin with water/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 or doctor/ physician

Department issuing SDS: Safety Representative Contact: LDN