# Safety data sheet

# **SECTION 1: Identification of the substance/mixture and of the com pany/undertaking**

#### 1.1 Product identifiers

Product name: RB (Ribavirin) ELISA Kit

Catalog Number: E-FS-E088

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

No further relevant information available.

Application of the substance / the preparation

In vitro diagnostic kit.

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

Manufacturer/Supplier: Elabscience Biotechnology Co., Ltd

Building B18, Biomedical Park, #858 Gaoxin Road, Donghu Hi-Tech Development Area, Wuhan, Hubei, China.

Fax: 86-27-87645690

E-mail: techsupport@elabscience.com Web: www.elabscience.com

1.4 Emergency telephone: 86-27-87385095

# **SECTION 2: Hazards identification**

#### 2.1 Classification of the substance or mixture

#### Classification according to Regulation (EC) No 1272/2008

The product is not classified according to the CLP regulation.

Classification according to Directive 67/548/EEC or Directive 1999/45/EC Not applicable.

#### Information concerning particular hazards for human and environment:

The product does not have to be labelled due to the calculation procedure of the "General

Classification guideline for preparations of the EU" in the latest valid version.

#### **Classification system:**

The classification is according to the latest editions of the EU-lists, and extended by company and literature data.

2nd Edition, revised in July, 2022

# **Elabscience**®

| and Category       Skin Corr. 1A       Skin Irrit. 2         Eye Irrit. 2       STOT SE 3         Signal word       Danger (Dng)       Danger (Dng)       Danger (Dng)         Hazard       H272       H302       H314         statements       H314       H315       H319         Precautionary       P220       P261       P260         statements       P280       P264       P264         P305+P351+P338       P270       P280       P301+P330+P3         P300       P271       P301+P330+P3       P301+P330+P3         P301+P312       P363       P302+P352       P304+P340         P304+P340       P310       P310       P304+P340   | 2.2 Label ele | ments               |                     |                      |
|--|---------------|---------------------|---------------------|----------------------|
| and Category       Skin Corr. 1A       Skin Irrit. 2         Eye Irrit. 2       STOT SE 3         Signal word       Danger (Dng)       Danger (Dng)       Danger (Dng)         Hazard       H272       H302       H314         H319       H319       H315         H320       P200       P261       P260         statements       P280       P264       P264         P305+P351+P338       P270       P280         P310       P271       P301+P330+P3         P301+P312       P363         P302+P352       P304+P340         P305+P351+P338       P305+P351+P3         P301+P312       P363         P302+P351       P305         P310       P305+P351+P338         P302+P352       P304+P340         P305+P351+P338       P305+P351+P3         P312       P501         P321       P405         P330       P321+P313         P337+P313       P37+P313         P362       P403+P233  |               | Substrate Reagent A | Substrate Reagent B | <b>Stop Solution</b> |
| Eye Irrit. 2         STOT SE 3           Signal word         Danger (Dng)         Danger (Dng)         Danger (Dng)           Hazard         H272         H302         H314           statements         H314         H315         H319           H335         H360         P260         P261         P260           statements         P280         P264         P264         P305+P351+P338         P270         P280           P305+P351+P338         P270         P280         P301+P330+P3         P280         P303+P361+P3           P310         P271         P301+P330+P3         P302+P352         P304+P340         P310           P302+P352         P304+P340         P310         P305+P351+P33         P312         P305+P351+P3           P312         P301         P312         P301         P321         P405           P330         P332+P313         P337+P313         P337+P313         P337+P313         P362           P403+P233         P403+P233         P403+P233         P403+P233         P403+P233 | Hazard Class  | Flam. Liq. 2        | Acute Tox. 4        | Skin Corr. 1A        |
| Signal word         Danger (Dng)         Danger (Dng)         Danger (Dng)           Hazard         H272         H302         H314           statements         H314         H315           H320         P200         P261         P260           statements         P280         P264         P264           P305+P351+P338         P270         P280         P301+P330+P3           P310         P271         P301+P330+P3         P303+P361+P3           P301+P312         P363         P302+P352         P304+P340           P310         P302+P352         P304+P340         P310           P312         P305         P310         P312         P305           P312         P301         P312         P301           P312         P301         P312         P301           P321         P301         P305         P332+P313           P332+P313         P337+P313         P337+P313         P362           P403+P233         P403+P233         P405         P305  | and Category  | Skin Corr. 1A       | Skin Irrit. 2       |                      |
| Signal word<br>HazardDanger (Dng)Danger (Dng)Danger (Dng)HazardH272H302H314statementsH314H315H319H319H316H35H319H316PrecautionaryP220P261P260StatementsP280P264P264P305+P351+P338P270P280P301+P330+P3P310P271P301+P312P363P301+P312P363P302+P352P304+P340P302+P351+P338P305+P351+P338P305+P351+P3P312P301P312P501P321P301P332+P313P337+P313P362P303+P313P362P403+P233  |               |                     | Eye Irrit. 2        |                      |
| Hazard H272 H302 H314<br>Hazard H272 H302 H314<br>H314 H315<br>H319<br>H335<br>Precautionary P220 P261 P260<br>statements P280 P264 P264<br>P305+P351+P338 P270 P280<br>P310 P271 P301+P330+P3<br>P280 P303+P361+P3<br>P301+P312 P363<br>P302+P352 P304+P340<br>P304+P340 P310<br>P305+P351+P338 P305+P351+P3<br>P312 P501<br>P321 P405<br>P330<br>P332+P313<br>P362<br>P403+P233  |               |                     | STOT SE 3           |                      |
| statements       H314       H315         H319       H319         H335       H335         Precautionary       P220       P261       P260         statements       P280       P264       P264         P305+P351+P338       P270       P280       P301+P330+P3         P280       P271       P301+P330+P3       P303+P361+P3         P310       P271       P363       P304+P340         P302+P352       P304+P340       P310         P304+P340       P310       P305+P351+P338       P305+P351+P338         P312       P301       P305         P330       P321       P305         P332+P313       P332+P313       P337+P313         P362       P403+P233       P405   | Signal word   | Danger (Dng)        | Danger (Dng)        | Danger (Dng)         |
| H319         H335         Precautionary       P220       P261       P260         statements       P280       P264       P264         P305+P351+P338       P270       P280         P310       P271       P301+P330+P3         P280       P280       P303+P361+P3         P301+P312       P363       P304+P340         P302+P352       P304+P340       P310         P305+P351+P338       P305+P351+P338       P305+P351+P3         P312       P305       P301         P312       P301       P305         P312       P305       P305         P330       P312       P405         P330       P321       P405         P330       P332+P313       P332+P313         P362       P303       P362         P403+P233       P362       P403+P233  | Hazard        | H272                | H302                | H314                 |
| H335         Precautionary       P220       P261       P260         statements       P280       P264       P264         P305+P351+P338       P270       P280         P310       P271       P301+P330+P3         P301+P312       P363         P302+P352       P304+P340         P304+P340       P310         P305+P351+P338       P305+P351+P338         P302+P352       P305+P351+P338         P312       P305         P312       P501         P321       P405         P330       P321+P313         P321+P313       P302+P313         P321+P313       P302+P313         P321+P313       P302+P313         P321+P313       P321+P313         P321+P313       P321+P313         P321+P313       P321+P313         P321+P313       P321+P313         P321+P313       P321+P313  | statements    | H314                | H315                |                      |
| Precautionary       P220       P261       P260         statements       P280       P264       P264         P305+P351+P338       P270       P280         P310       P271       P301+P330+P3         P280       P303+P361+P3         P301+P312       P363         P302+P352       P304+P340         P302+P352       P304+P340         P305+P351+P338       P305+P351+P338         P312       P301         P321       P501         P330       P332+P313         P337+P313       P337+P313         P362       P403+P233  |               |                     | H319                |                      |
| statements       P280       P264       P264         P305+P351+P338       P270       P280         P310       P271       P301+P330+P3         P280       P303+P361+P3         P301+P312       P363         P302+P352       P304+P340         P305+P351+P338       P305+P351+P3         P305+P351+P338       P305+P351+P3         P312       P501         P321       P405         P330       P332+P313         P337+P313       P362         P403+P233       P405  |               |                     | H335                |                      |
| P305+P351+P338       P270       P280         P310       P271       P301+P330+P3         P280       P303+P361+P3         P301+P312       P363         P302+P352       P304+P340         P304+P340       P310         P305+P351+P338       P305+P351+P338         P312       P501         P321       P405         P330       P332+P313         P337+P313       P337+P313         P362       P403+P233  | Precautionary | P220                | P261                | P260                 |
| P310       P271       P301+P330+P3         P280       P303+P361+P3         P301+P312       P363         P302+P352       P304+P340         P304+P340       P310         P305+P351+P338       P305+P351+P3         P312       P501         P330       P332+P313         P337+P313       P362         P403+P233       P403+P233   | statements    | P280                | P264                | P264                 |
| P280P303+P361+P3P301+P312P363P302+P352P304+P340P304+P340P310P305+P351+P338P305+P351+P3P312P501P321P405P330P332+P313P337+P313P362P403+P233P405  |               | P305+P351+P338      | P270                | P280                 |
| P301+P312       P363         P302+P352       P304+P340         P304+P340       P310         P305+P351+P338       P305+P351+P3         P312       P501         P321       P405         P330       P332+P313         P37+P313       P362         P403+P233       P403+P233   |               | P310                | P271                | P301+P330+P331       |
| P302+P352P304+P340P304+P340P310P305+P351+P338P305+P351+P3P312P501P321P405P330P332+P313P337+P313P362P403+P233   |               |                     | P280                | P303+P361+P353       |
| P304+P340       P310         P305+P351+P338       P305+P351+P3         P312       P501         P321       P405         P330       P332+P313         P337+P313       P362         P403+P233       P405  |               |                     | P301+P312           | P363                 |
| P305+P351+P338       P305+P351+P3         P312       P501         P321       P405         P330       P332+P313         P337+P313       P362         P403+P233       P405   |               |                     | P302+P352           | P304+P340            |
| P312P501P321P405P330P332+P313P337+P313P362P403+P233P403+P233   |               |                     | P304+P340           | P310                 |
| P321 P405<br>P330<br>P332+P313<br>P337+P313<br>P362<br>P403+P233   |               |                     | P305+P351+P338      | P305+P351+P338       |
| P330<br>P332+P313<br>P337+P313<br>P362<br>P403+P233  |               |                     | P312                | P501                 |
| P332+P313<br>P337+P313<br>P362<br>P403+P233  |               |                     | P321                | P405                 |
| P337+P313<br>P362<br>P403+P233   |               |                     | P330                |                      |
| P362<br>P403+P233  |               |                     | P332+P313           |                      |
| P403+P233  |               |                     | P337+P313           |                      |
|  |               |                     | P362                |                      |
| P405   |               |                     | P403+P233           |                      |
|  |               |                     | P405                |                      |
| P501   |               |                     | P501                |                      |

# 2.3 Supplemental Hazard Void.

# **SECTION 3: Composition/information on ingredients**

Description: Mixture of substances with nonhazardous additions.

| Component                      | Hazardous<br>substance         | %<br>(wt/wt) | Component<br>classificatio<br>n                 | CAS No.        | EC No.        |
|--------------------------------|--------------------------------|--------------|---|----------------|---------------|
| ELISA                          |                                |              | non-hazardo                                     |                |               |
| Microtiter plate               | -                              | -            | us  | -              | -             |
| Standard Liquid                | _                              |              | non-hazardo                                     | _              | _             |
| Standard Elquid                |                                |              | us  | _              | _             |
| HRP Conjugate                  | _                              | _            | non-hazardo                                     | _              | _             |
| Diluent                        |                                |              | us  |                |               |
| 11×Concentrated                | _                              | _            | non-hazardo                                     | _              | _             |
| HRP Conjugate                  |                                |              | us  |                |               |
| Substrate                      | Urea hydrogen peroxide         | 0.1%         | Flam. Liq. 2<br>Skin Corr.                      | 124-43-6       | 204-701-      |
| Reagent A                      | orea nydrogen peroxide         |              | 1A  |                | 4             |
|                                |                                |              | Acute Tox.                                      |                |               |
| Substrate<br>Reagent B         | 3,3',5,5'-tetramethylbenzidine | 0.03%        | 4<br>Skin Irrit. 2<br>Eye Irrit. 2<br>STOT SE 3 | 54827-17-<br>7 | 259-364-<br>6 |
| Sample Diluent                 | -                              | -            | non-hazardo<br>us                               | -              | -             |
| 20×Concentrated<br>Wash Buffer | -                              | -            | non-hazardo<br>us                               | -              | -             |
| Stop Solution                  | Sulfuric acid                  | x<0.05%      | Skin Corr.<br>1A                                | 7664-93-9      | 231-639-<br>5 |

### **SECTION 4: First aid measures**

#### 4.1 Description of first aid measures

General information: No special measures required.

After inhalation: due the small volumes involved, there is a minimal risk of inhalation. In case there appear to be symptoms of exposure, supply fresh air. Monitor respiration. If breathing becomes difficult, consult a doctor and give oxygen. Get medical aid.

After skin contact: immediately flush with large amounts of water and soap. Remove all contaminated clothing and wash them before reusing. In presence of irritation, get medical aid.

After eye contact flush eyes with large amounts of water for at least 15 minutes. Insure adequate washing by keeping eyelids open with fingers. Get medical aid.

After swallowing: Ingestion may cause nausea and vomiting. Do not administer anything if victim is unconscious. Rinse mouth with water. Get medical aid.

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

No further relevant information available.

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

No further relevant information available

# **SECTION 5: Firefighting measures**

#### 5.1 Extinguishing media:

CO2, powder or water spray. Fight larger fires with water spray or alcohol resistant foam.

#### 5.2 Special hazards arising from the mixture:

No further relevant information available.

#### 5.3 Advice for firefighters:

In case of fire, if necessary, wear approved self-contained breathing apparatus and appropriate protective clothing.

# **SECTION 6: Accidental release measures**

#### 6.1 Personal precautions, protective equipment and emergency procedures:

Wear protective clothing

#### 6.2 Environmental precautions:

Dilute with plenty of water.

Do not allow to enter sewers/ surface or ground water.

#### 6.3 Methods and materials for containment and cleaning up:

Absorb with liquid-binding material (sand, diatomite, acid binders, universal binders, sawdust).

#### 6.4 Reference to other sections:

See Section 7 for information on safe handling.

See Section 8 for information on personal protection equipment.

See Section 13 for disposal information.

# **SECTION 7: Handling and storage**

#### 7.1 Precautions for safe handling

No special measures required

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

Keep products tightly sealed in their original containers. Store bottles between +2 °C and +8 °C. Avoid physical damage to containers. Do not expose to heat or direct light. The packaging guarantees the component isolation from incompatible material.

#### 7.3 Specific end uses

No further relevant information available.

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

#### 8.1 Control parameters

Components with workplace control parameters.

Exposure workplace limit values for sulfuric acid (data refer to pure substance): 0.05 mg/m<sup>3</sup> (TWA).

Additional information: The lists valid during the making were used as basis.

#### 8.2 Exposure controls

Personal protective equipment:

#### General protective and hygienic measures:

The usual precautionary measures are to be adhered to when handling chemicals.

Respiratory protection: Not required.

#### **Protection of hands:**

The glove material has to be impermeable and resistant to the product/ the substance/ the preparation.

Due to missing tests no recommendation to the glove material can be given for the product/ the preparation/ the chemical mixture.

Selection of the glove material on consideration of the penetration times, rates of diffusion and the degradation

#### Material of gloves

The selection of the suitable gloves does not only depend on the material, but also on further marks of quality and varies from manufacturer to manufacturer. As the product is a preparation of several substances, the resistance of the glove material can not be calculated in advance and has therefore to be checked prior to the application.

#### Penetration time of glove material

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

#### For the permanent contact gloves made of the following materials are suitable:

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

#### As protection from splashes gloves made of the following materials are suitable:

The exact break trough time has to be found out by the manufacturer of the protective gloves and has to be observed.

Eye protection: Goggles recommended during refillinge.

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# **SECTION 9: Physical and chemical properties**

| ELISA Microtiter plate        | polystyrene plastic material, 96-wells breakable microtiter |  |  |  |
|-------------------------------|---|--|--|--|
| *                             | plate (12 strips each of 8 wells)                           |  |  |  |
| Standard Liquid               | liquid, colourless, odourless                               |  |  |  |
| HRP Conjugate Diluent         | liquid, colourless, odourless                               |  |  |  |
| 11×Concentrated HRP Conjugate | liquid, colourless, odourless                               |  |  |  |
| Sample Diluent                | liquid, colourless, odourless                               |  |  |  |
| Substrate Reagent A           | liquid, colourless, odourless                               |  |  |  |
| Substrate Reagent B           | liquid, colourless, odourless                               |  |  |  |
| Stop Solution                 | liquid, colourless, viscous, odour characteristic           |  |  |  |
| 20×Concentrated Wash Buffer   | liquid, colourless, odourless                               |  |  |  |

# **SECTION 10: Stability and reactivity**

- **10.1 Reactivity:** No further relevant information available.
- 10.2 Chemical stability

Stable under the conditions for storage and handling described in the instructions.

- 10.3 Possibility of hazardous reactions: No further relevant information available.
- **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.

# **SECTION 11: Toxicological information**

#### 11.1 Information on toxicological effects

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

Primary irritant effect:

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.

Respiratory or skin sensitisation Based on available data, the classification criteria are not met

#### CMR effects (carcinogenity, mutagenicity and toxicity for reproduction)

Germ cell mutagenicity 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.

STOT-single exposure Based on available data, the classification criteria are not met.

STOT-repeated exposure Based on available data, the classification criteria are not met.

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

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# **SECTION 12: Ecological information**

The components are furnished in volumes that do not represent hazard for the environment if used and disposed of correctly.

This product contains no components considered to be either persistent, bioaccumulative or toxic (PBT) or very persistent and very bioaccumulative (vPvB).

# **SECTION 13: Disposal considerations**

**Recommendation:** Disposal must be made according to official regulations.

**Recommendation:** Disposal must be made according to official regulations.

Recommended cleansing agents: Water, if necessary together with cleansing agents.

# **SECTION 14: Transport information**

14.1 Environmental hazards

Marine pollutant: No

14.2 Special precautions for user: Not applicable.

**14.3 Transport in bulk according to Annex II of Marpol and the IBC Code:** Not applicable.

# **SECTION 15: Regulatory information**

This safety data sheet is in accordance with Regulation (EC) No. 1907/2006 and Regulation No. 453/2010.

# **SECTION 16: Other information**

#### 16.1 Hazard statements and precautionary statements full text

Flam. Liq. 2: Flammable liquids (category 2).
Skin Corr. 1A: Corrosive to the skin (category 1A).
Met. Corr. 1: Substances Corrosive to Metal
Skin Irrit. 2: Skin irritation (category 2)
Eye Dam. 1: Serious eye damage
Acute Tox. 4: Harmful if inhaled
Eye Irrit. 2: Causes serious eye irritation
STOT SE 3: Hazardous to the aquatic environment
H272: May intensify fire; oxidizer.
H302: Harmful if swallowed
H314: Causes severe skin burns and eye damage
H315: Causes serious eye irritation

#### **16.2 Precautionary statements**

P220: Keep away from clothing and other combustible materials.

**P260:** Do not breathe dust/fume/gas/mist/vapours/spray

P261: Avoid breathing dust/fume/gas/mist/vapors/spray

**P264:** Wash thoroughly after handling

**P270:** Do not eat, drink or smoke when using this product.

**P271:** Use only outdoors or in a well-ventilated area.

P280: Wear protective gloves/protective clothing/eye protection/face protection

P301+P312: IF SWALLOWED: call a POISON CENTER/doctor/... IF you feel unwell.

P301+P330+P331: if swallowed: Rinse mouth. Do NOT induce vomiting

P302+P352: IF ON SKIN: wash with plenty of water.

**P303+P361+P353:** if on skin (or hair): Take off immediately all contaminated clothing. Rinse skin with water/ shower

P304+P340: if inhaled: Remove person to fresh air and keep comfortable for breathing

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/doctor

P312: Call a POISON CENTER or doctor/... if you feel unwell.

P330: Rinse mouth.

P332+P313: IF SKIN irritation occurs: Get medical advice/attention.

**P337+P313:** IF eye irritation persists: Get medical advice/attention.

P362: Take off contaminated clothing.

P363: Wash contaminated clothing before reuse

P403+P233: Store in a well-ventilated place. Keep container tightly closed.

P405: Store locked up

P501: Dispose of contents to in accordance with local regulation

Abbreviations and acronyms:

RID: Règlement international concernant le transport des marchandises dangereuses par chemin de fer

(Regulations Concerning the International Transport of Dangerous Goods by Rail)

ICAO: International Civil Aviation Organization

GHS: Globally Harmonized System of Classification and Labelling of Chemicals

EINECS: European Inventory of Existing Commercial Chemical Substances

ELINCS: European List of Notified Chemical Substances

CAS: Chemical Abstracts Service (division of the American Chemical Society)

PBT: Persistent, Bioaccumulative and Toxic

vPvB: very Persistent and very Bioaccumulative

IMPORTANT! Read the safety data sheets before the use and disposal of this product. Insure that this information is understood by the operators exposed to this product. Use this product for the intended purpose as indicated in the instruction manual.

The above information is believed to be accurate and up to date. It is, however, liable to change due to the continuous modification of legislation and of standards and security data. Since the correct or incorrect use of this product is beyond our jurisdiction, this information cannot be expressed or implied to be comprehensive. Elabscience cannot be held responsible for any improper use of the product, including those uses that could violate current patents or other copyrights. Only the user is responsible for the evaluation of this product's conformity and of the risks involved before use, and must adopt appropriate precautions towards self and other persons involved.