Safety Data Sheet

Revision Date: 2025.04.01 Version: 03

1. IDENTIFICATION OF THE SUBSTANCE / MIXTURE AND OF THE COMPANY / UNDERTAKING

1.1 Product Identifiers

Product Name: SARS-CoV-2 Spike Trimer (Wild Type) Specific ELISA Kit (For Vaccine Development)

Catalog Number: RAS-A115

UFI: No information available.

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

Identified Uses: For Research Use Only.

1.3 Details of the supplier of the safety data sheet

Switzerland:

Company: ACROBiosystems AG
Address: Switzerland Innovation Park Basel Area AG Lichtstrasse 35 4056 Basel
Internet: www.acrobiosystems.com
Telephone: +41-800-040-012
Fax: +1-888-377-6111
Email Address: Customerservice@acrobiosystems.com

China: (Headquarter and Manufacturing Center)
Company: ACROBIOSYSTEMS CO., LTD
Address: FLOOR 4, BUILDING 4. NO.8 HONGDA NORTH ROAD, BDA, BEIJING, CHINA
Telephone: +86-010-67855298
Fax: +1-888-377-6111
Email Address: Customerservice@acrobiosystems.com

USA:
Company: Acrobiosystems Inc.
Address: 1 Innovation Way, Newark, DE 19711, USA
Telephone: +1-800-810-0816
Fax: +1-888-377-6111
Email Address: Customerservice@acrobiosystems.com

1.4 Emergency Telephone Number

Emergency Tel: Switzerland: +41-800-040-012 / China: +86-010-67855298 / USA: +1-800-810-0816.

2. HAZARDS IDENTIFICATION

2.1 Classification of the substance or mixture

Classification according to Regulation EC Directives 67/548/EEC, 1999/45/EC, 1272/2008 [CLP], 1907/2006/EC[REACH], GHS and 29 CFR 1910.1200 [OSHA].

Skin Corrosion/Irritation - Category 2

Serious eye damage/eye irritation - Category 2A

2.2 Label Elements

Labeling according to Regulation (EC) No 1272/2008 [GHS/CLP]

Pictogram(s):



Signal Word: Warning

Hazard Statement(s):

H315 Causes skin irritation.

H319 Causes serious eye irritation.

Precautionary Statement(s):

P264 Wash hands thoroughly after handling.

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

P302+352 IF ON SKIN: Wash with plenty of soap and water.

P305+351+338 IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.

P321 Specific treatment (see Section 4).

P332+313 If skin irritation occurs: Get medical advice/attention.

P337+313 If eye irritation persists: Get medical advice/attention.

P362+364 Take off contaminated clothing and wash it before reuse.

2.3 Other Hazards - None

3. COMPOSITION / INFORMATION ON INGREDIENTS

3.1 Substances

Not applicable.

3.2 Mixtures

Component	CAS No.	EC No.	Index No.	Classification	Conc.
Sulfuric Acid	7664-93-9	231-639-5	016-020-00-8	H315, H319	1 M

4. FIRST AID MEASURES

4.1 Description of first aid measures

General Advice

Consult a doctor and show this safety data sheet.

If Inhaled

Move person into fresh air. If not breathing, give artificial respiration. Consult a physician. Show this MSDS.

In Case of Skin Contact

Immediately take off contaminated clothing or shoes. Wash with plenty of soap and water. Consult a physician.

In Case of Eye Contact

Rinse thoroughly with water for at least 15 minutes and immediately consult a physician.

If Swallowed

Do NOT induce vomiting. Never give anything by mouth to an unconscious person. Rinse mouth with water. Immediately consult a physician. Show this MSDS.

4.2 Most important symptoms and effects, both acute and delayed

See Section 11.

4.3 Indication of immediate medical attention and special treatment needed

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

5. FIRE-FIGHTING MEASURES

5.1 Extinguishing Media

Suitable extinguishing media

Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

5.2 Special hazards arising from the substance or mixture

In case of fire, toxic and corrosive gases may be formed.

5.3 Precautions for fire-fighters

Self-contained breathing apparatus and full protective clothing must be worn in case of fire.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment and emergency procedures

Use appropriate personal protective equipment to prevent contamination of skin, eyes and personal clothing. Avoid breathing vapors, mist or gas. Ensure adequate ventilation.

6.2 Environmental precautions

Keep away from drains.

6.3 Methods and materials for containment and cleaning up

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For required personal protection equipment see section 8. For disposal see section 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Avoid inhalation of vapor or mist. Use normal measures for preventive fire protection.

7.2 Conditions for safe storage, including any incompatibilities

Store in a cool, dry place. Keep container tightly closed in a dry and well-ventilated place. Containers which are opened must be carefully resealed and kept upright to prevent leakage.

7.3 Specific end use(s)

In addition to use mentioned in the Section 1.2, unforeseen other specific end uses.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

8.1 Control parameters

Components with workplace control parameters

Contains no substances with occupational exposure limit values and biological limit values.

Derived No effect level (DNEL) & Predicted No Effect Concentration (PNEC)

No data available.

8.2 Exposure controls

Appropriate Engineering Controls

Use with adequate ventilation including local extraction. Ensure that eyewash stations and safety showers are close to the workstation location.

Personal Protection Equipment

Eye / Face Protection

Wear approved safety goggles.

Skin Protection

Handle with protective gloves, plastic or rubber. Use proper glove removal technique (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Body Protection

Appropriate footwear and any additional skin protection measures should be selected based on the task being performed and the risks involved. Wear suitable protective clothing as protection against splashing or contamination.

Respiratory Protection

In case of inadequate ventilation, use a suitable respirator. If the respirator is the sole means of protection, use a full-face supplied air respirator. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Environment exposure controls

Do not let product enter drains and soil, and keep container tightly closed before and after operation. Keep in suitable, closed containers for disposal.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

Appearance	Lyophilized white powder or clear liquid.	**Vapor Pressure**	No data available.
Odor	Little to none.	**Vapor Density**	No data available.
Odor Threshold	No data available.	**Relative Density**	No data available.
pH	No data available.	**Solubility(ies)**	Soluble
Melting / Freezing Point	No data available.	**Partition Coefficient**	No data available.
Boiling Point / Range	No data available.	**Autoignition Temperature**	No data available.
Flash Point	No data available.	**Decomposition Temperature**	No data available.
Evaporation Rate	No data available.	**Viscosity**	No data available.
Flammability (Solid, Gas)	No data available.	**Explosive Properties**	No data available.
Upper / Lower Flammability or Explosive Limits	No data available.	**Oxidizing Properties**	No data available.

9.2 Other safety information

No data available.

10. STABILITY AND REACTIVITY

10.1 Reactivity

Contact with metals produces highly flammable hydrogen gas. Addition of water liberates excessive heat.

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

Under normal conditions of storage and use, hazardous reactions will not occur.

10.4 Conditions to avoid

Bases, Halides, Metals, Alkalis, Acetonitrile.

10.5 Incompatible materials

Most metals, oxidizers, reducers, bases, metal carbonates, cyanides, sulphides, carbides, oxides, metal acetylides, hydrides, halogens, organic or combustible materials, perchlorates, acetonitrile, permanganates, alcohols, picrates.

10.6 Hazardous decomposition products

Products formed under fire conditions: oxides of Sulphur, hydrogen gas.

11. TOXICOLOGICALINFORMATION

11.1 Information on toxicological effects

Acute Toxicity

Can cause severe burns upon contact while the vapors or mist are corrosive and can cause severe irritation or damage to the nose, throat and lungs. Ingestion of this product causes pain, nausea and vomiting and may be fatal if large doses are ingested.

Skin Corrosion / Irritation

Can cause severe burns.

Serious Eye Damage / Irritation

Can cause severe burns.

Respiratory or Skin Sensitization

Classified based on available data.

Germ Cell Mutagenicity

Classified based on available data.

Carcinogenicity

Classified based on available data.

Reproductive Toxicity

Classified based on available data.

Specific Target Organ Toxicity-Single Exposure

Classified based on available data.

Specific Target Organ Toxicity-Repeated Exposure

Classified based on available data.

Aspiration Hazard

Can cause severe burns.

Symptoms / Routes of Exposure

Inhalation: Harmful if inhaled. Exposure to decomposition products may cause a health hazard. Serious effects may be delayed following exposure. Material is extremely destructive to the tissue of the mucous membranes and upper respiratory tract.

Ingestion: Harmful if swallowed. Irritating to mouth, throat and stomach. Causes burns.

Skin: Causes skin irritation / causes burns.

Eyes: Causes serious eye irritation / causes burns.

Delayed / Immediate Effects: Repeated skin contact with this product may lead to dermatitis while repeated inhalation may cause bronchitis, conjunctivitis, respiratory infections, emphysema and digestive disturbances. May cause erosion and discoloration of the teeth.

11.2 Information on other hazards

Endocrine disrupting properties

Classified based on available data.

Other information

None

12. ECOLOGICALINFORMATION

12.1 Toxicity

This product may affect the acidity (pH-factor) in water with risk of harmful effects to aquatic organisms.

12.2 Persistence and degradability

No data available.

12.3 Bioaccumulative potential

No data available.

12.4 Mobility in soil

No data available.

12.5 Results of PBT and vPvB assessment

No data available.

12.6 Endocrine disrupting properties

No data available.

12.7 Other adverse effects

No data available.

12.8 Additional information

None

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product

Dispose of waste in accordance to applicable national, regional, or local regulations.

Contaminated Packaging

Dispose in the same manner as unused product.

14. TRANSPORT INFORMATION

Classified according to the criteria of the UN Model Regulations as reflected in the IMDG Code, ADR, RID, DOT and IATA.

14.1 UN-Number

UN2796

14.2 UN proper shipping name

Battery fluid, acid or Sulfuric acid with not more than 51 percent acid.

14.3 Transport hazard class(es)

8

14.4 Packaging group

II

14.5 Environmental hazards

This product is not classified as environmentally hazardous according to the UN Model Regulations, nor a marine pollutant according to the IMDG Code.

14.6 Special precautions for users

No information available.

15. REGULATORY INFORMATION

This safety datasheet complies with the requirements of Regulation (EC) No. 453/2010, (EU) 2017/542 and (EU) 2020/878.

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

Component	SVHC	EC inventory	TSCA	SARA 313	SARA 311/312	CERCLA Reportable Quantity	California Proposition 65	KECI	AIIC	ENCS
Sulfuric Acid	×	√	√	×	√	√	√	√	√	√

[SVHC]	Candidate list of Substances of Very High Concern for authorization under EU REACH regulation
[EC inventory]	European Inventory of Existing Commercial Chemical Substances
[TSCA]	United States Toxic Substances Control Act Inventory
[SARA 313]	Superfund Amendments and Reauthorization Act: Part 313
[SARA 311/312]	Superfund Amendments and Reauthorization Act: Part 311/312
[CERCLA Reportable Quantity]	Comprehensive Environmental Response, Compensation, and Liability Act
[California Proposition 65]	Safe Drinking Water and Toxic Enforcement Act of 1986
[KECI]	Korea Existing Chemicals Inventory
[AIIC]	Australian. Inventory of Industrial Chemical (AIIC)
[ENCS]	Japan Inventory of Existing & New Chemical Substances

15.2 Chemical safety assessment

A Chemical Safety Assessment has not been made for this product.

16. OTHER INFORMATION

The above information was acquired by diligent search and/or investigation and the recommendations are based on prudent application of professional judgment. The information shall not be taken as being all inclusive and is to be used only as a guide. All materials and mixtures may present unknown hazards and should be used with caution. Since the Company cannot control the actual methods, volumes, or conditions of use, the Company shall not be held liable for any damages or losses resulting from the handling or from contact with the product as described herein.

End of safety data sheet.