BOSTER BIOLOGICAL TECHNOLOGY
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Material Safety Data Sheet

1. CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

1.1 Identification of the Substance

Catalog Number	FEK0830
Product Name	Mouse RANK / CD265 PicoKine® Quick ELISA Kit

Components: 96-well plate, Standard(contains Sodium azide), Sample diluent buffer(contains Sodium azide), Biotinylated detection antibody (contains Sodium azide), Antibody diluent buffer(contains Sodium azide), ABC(contains Sodium azide), ABC diluent buffer(contains Sodium azide), Color developing agent, Stop solution (contains Sulphuric acid).

1.2 Application of the substance or mixture

For research use only.

1.3 Company Identification

Boster Biological Technology Co., Ltd.

3942 B Valley Ave, Pleasanton, CA, 94566, USA.

Fone: (888) 466-3604 Fax: (925) 215-2184

2. HAZARDS IDENTIFICATION

Classification : Regulation (EC) No. 1272/2008 [CLP/GHS]

Stop Solution contains Sulfuric Acid : Skin Irrit. Class 2

Signal Word : WARNING

Hazard statements : Causes irritation and serious eye irritation.

Precautionary statements : Wash hands thoroughly after handling. Wear protective gloves, clothing and eye and face protection.

Response:

IF ON SKIN (or hair): Immediately remove contaminated clothing and wash before re-use. Wash skin immediately with soap

and water. Get medical attention if irritation persists after washing.

IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do.

Continue rinsing. If eye irritation persists, get medical attention.

IF SWALLOWED: Call a POISON CENTER or physician if you feel unwell. Rinse mouth.

Classification according to Directive 67/548/EEC : Irritating to eyes and skin.

Hazard Symbol / R-Phrase / S-Phrase : Xi, Irritant / R36/38, Irritating to eyes and skin. / S26, In case of contact with eyes, rinse immediately with plenty of water and see medical advice.

Other hazards : none

3. COMPOSITION/INFORMATION ON INGREDIENTS

3.1 Substances

Chemical Name	EC-No	CAS-No	Concentration %	Classification (67/548)	Classification
Sodium azide	247-852-1	26628-22-8	0.02	T+; R27/28 R32 N; R50/53	Acute Tox.2 (H300) Acute Tox.1(H310) Aquatic Acute 1(H400) Aquatic Chronic 1(H410) (EUH032)

Chemical Name	EC-No	CAS-No	Concentration %	Classification (67/548)	Classification
Sulphuric acid	231-639-5	7664-93-9	2	C; R35	Skin Corr. 1A (H314)

4. FIRST AID MEASURES

Skin contact	Wash off immediately with soap and plenty of water.
Eye contact	Rinse immediately with plenty of water. Consult a physician.
Ingestion	Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.
Inhalation	If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.
Notes to physician	Treat symptomatically.

5. FIRE FIGHTING MEASURES

Flammable properties	Not flammable.
Flash point	Not available
Suitable extinguishing media	Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.
Sensitivity to Mechanical Impact	None.
Sensitivity to Static Discharge	None.
Protective equipment for firefighters	Wear self-contained breathing apparatus and protective suit.
Special hazards arising from the substance or mixture	Nature of decomposition products not known.

6. ACCIDENTAL RELEASE MEASURES

Personal precautions	Ensure adequate ventilation.
Environmental precautions	Do not let product enter drains.

Methods and materials for containment and cleaning up	Keep in suitable, closed containers for disposal.
Reference to other sections	For disposal see section 13.

7. HANDLING AND STORAGE

Handling	Handle in accordance with good industrial hygiene and safety practice.
Storage	Store according to product specifications.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

8.1 Exposure Guidelines

This product does not contain any hazardous materials with occupational exposure limits established by the region specific regulatory bodies.

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
Sulphuric acid 7664-93-9	TWA: 0.2 mg/m^3 thoracic fraction	TWA: 1 mg/m^3 (vacated) TWA: 1 mg/m^3	IDLH: 15 mg/m^3 TWA: 1 mg/m^3

NIOSH IDLH: Immediately Dangerous to Life or Health

Other Exposure Guidelines

Vacated limits revoked by the Court of Appeals decision in AFL-CIO v. OSHA, 965 F.2d 962 (11th Cir., 1992).

8.2 Appropriate engineering controls

Follow general industrial hygiene and safety practice.

Personal protective equipment

Respiratory protection	In case of insufficient ventilation wear suitable respiratory equipment
Hand protection	Impervious gloves
Eye protection	Safety glasses with side-shields

Skin and body protection	Lightweight protective clothing

Environmental exposure controls

Prevent product from entering drains

9. PHYSICAL AND CHEMICAL PROPERTIES

Important Health Safety and Environment Information

a) Appearance Form:	no data available
b) Odour	no data available
c) Odour Threshold	no data available
d) pH	no data available
e) Melting point/freezing point	no data available
f) Initial boiling point and boiling range	no data available
g) Flash point	no data available
h) Evaporation rate	no data available
i) Flammability (solid, gas)	no data available
j) Upper/lower flammability or explosive limits	no data available
k) Vapour pressure	no data available
l) Vapour density	no data available
m) Relative density	no data available
n) Water solubility	no data available
o) Partition coefficient: noctanol/water	no data available
p) Auto-ignition temperature	no data available

q) Decomposition temperature	no data available
r) Viscosity	no data available
s) Explosive properties	no data available
t) Oxidizing properties	no data available

10. STABILITY AND REACTIVITY

Chemical Stability	Stable under recommended storage and handling conditions.
Conditions to avoid	no data available
Incompatible materials	no data available
Hazardous decomposition products	no data available
Hazardous polymerization	Hazardous polymerization does not occur.

11. TOXICOLOGICAL INFORMATION

Acute toxicity

Product Information

Product does not present an acute toxicity hazard based on known or supplied information.

Chronic toxicity

Carcinogenicity

This product contains one or more substances which are classified by IARC as carcinogenic to humans (Group I), probably carcinogenic to humans (Group 2A) or possibly carcinogenic to humans (Group 2B)

Chemical Name	ACGIH	IARC	NTP	OSHA
Sulphuric acid	A2	Group 1	Known	X

ACGIH: (American Conference of Governmental Industrial Hygienists)

A2 - Suspected Human Carcinogen

IARC: (International Agency for Research on Cancer)

Group 1 - Carcinogenic to Humans

NTP: (National Toxicity Program)

Known - Known Carcinogen

OSHA: (Occupational Safety & Health Administration)

X – Present

Target Organ Effects Eyes. Respiratory system. Skin. Teeth.

12. ECOLOGICAL INFORMATION

Ecotoxicity

The environmental impact of this product has not been fully investigated.

Chemical Name	Toxicity to algae	Toxicity to fish	Toxicity to microorganisms	Toxicity to daphnia and other aquatic invertebrates
Sulphuric acid		500: 96 h Brachydanio rerio mg/L LC50 static		29: 24 h Daphnia magna mg/L EC50

13. DISPOSAL CONSIDERATIONS

Disposal methods	This material, as supplied, is not a hazardous waste according to Federal regulations(40 CFR 261). This material could become a hazardous waste if it is mixed with or otherwise comes in contact with a hazardous waste, if chemical additions are made to this material, or if the material is processed or otherwise altered. Dispose of waste in accordance to applicable national, regional, or local regulations.
Contaminated packaging	Dispose of as unused product.

This product contains one or more substances that are listed with the State of California as a hazardous waste.

Chemical Name	California Hazardous Waste Status

Sulphuric acid	Toxic Corrosive

14. TRANSPORT INFORMATION

DOT	Not dangerous goods
ADR	Not dangerous goods
IATA	Not dangerous goods

15. REGULATORY INFORMATION

US Federal and State Regulations

SARA 313 Components :

This product contains a chemical or chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372:

Chemical Name	CAS-No	Concentration %	SARA 313-Threshold Values %
Sulphuric acid	7664-93-9	2	1

SARA 311/312 Hazards : Acute Health Hazard

Clean Water Act

This product does not contain any substances regulated as pollutants to the Clean Water Act(40 CFR 122.21 and 40 CFR 122.42)

Chemical Name	CWA-Reportable Quantities	CWA-Toxic Pollutants	CWA-Priority Pollutants	CWA-Hazardous Substances
Sulphuric acid	1000lb			X

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehansive Environmental Response Comprehension and Liability Act (CERCLA) (40 CFR 302) of the Superfund Amendments and Reauthorization Act (SARA) (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

Chemical Name	Hazardous Substances RQs	Extremely Hazardous Substances RQs	RQ
Sulphuric acid	1000lb	1000lb	RQ 1000lb final RQ RQ 454kg final RQ

California Proposition 65 :

This product contains the following Proposition 65 chemicals:

Chemical Name	CAS-No	California Prop.65
Sulphuric acid	7664-93-9	Carcinogen

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 Boster Corporation 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.