SAFETY DATA SHEET

SECTION 1: Identification of the substance/ mixture and of the company/ undertaking

a. Product Name : Methylene Blue Stain, 0.02%

Product Number : L13004, L13005

b. Relevant identified uses of the substance or mixture and uses advised against : **Identified uses**
Laboratory chemicals, Manufacture of substances

c. Manufacturer & Supplier : Aligned Genetics, Inc
18 Gosan-ro 148beon-gil,
Gunpo-si,
Gyeonggi-do,
Republic of Korea
Telephone: +82-31-478-4185
Fax: +82-31-360-4277
E-mail: sales@logosbio.com

Emergency telephone number +82 31 478 4185

For research use only. Not intended for human or animal diagnostic or therapeutic use.

SECTION 2: Hazards identification

a. GHS classification

Classification according to Regulation (EC) No 1272/2008
Acute toxicity, Oral (Category 4), H302

b. GHS-Labeling

Labeling according to Regulation (EC) No 1272/2008

Hazard pictograms

Signal word
Warning

Hazard statements
H302 – Harmful if swallowed.

Precautionary statements
P264 – Wash skin thoroughly after handling.
P270 – Do not eat, drink, or smoke when using this product.
P301+P312– IF SWALLOWED: Rinse mouth. Call a POISON CENTER or doctor/physician

if you feel unwell.
P330 – Rinse mouth.
P501 – Dispose of contents/container to an approved waste disposal plant.

c. Other hazard which do not result in classification

None

SECTION 3: Composition/ Information on ingredients

3b. Mixtures

Component:	Methylthioninium chloride hydrate
Synonyms:	Tetramethylthionine chloride, 3,7-bis(Dimethylamino)phenazathionium chloride
Formula:	$C_{16}H_{18}ClN_3S \cdot xH_2O$
CAS-No.:	122965-43-9
Weight%:	< 1%

SECTION 4: First aid measures

a. In case of eye contact
Flush eyes with water as a precaution.

b. In case of skin contact
Wash off with soap and plenty of water. Consult a physician.

c. If inhaled
If breathed in, move person into fresh air. If not breathing, give artificial respiration. Consult a physician.

d. If swallowed
Never give anything by mouth to an unconscious person. Rinse mouth with water. Consult a physician.

e. Most important symptoms and effects, both acute and delayed
No data available.

SECTION 5: Firefighting measures

a. Suitable extinguishing media
Use water spray, alcohol-resistant foam, dry chemical or carbon dioxide.

b. Specific hazards arising from the chemical
No data available.

c. Special protective actions for fire-fighters
Wear self-contained breathing apparatus for firefighting if necessary.

d. Further information
No data available.

SECTION 6: Accidental release measures

a. Personal precautions, protective equipment and emergency procedures
Use personal protective equipment. Avoid dust formation. Avoid breathing vapors, mist or gas. Ensure adequate ventilation. Avoid breathing dust.

b. Environmental precautions
Do not let product enter drains.

c. Methods and materials for containment and cleaning up
Pick up and arrange disposal without creating dust. Sweep up and shovel. Keep in suitable, closed containers for disposal.

SECTION 7: Handling and storge

a. Precautions for safe handling
Avoid contact with skin and eyes. Avoid formation of dust and aerosols. Provide appropriate exhaust ventilation at places where dust is formed. Normal measures for preventive fire protection.

b. Conditions for safe storge
Store in cool place. Keep container tightly closed in a dry and well-ventilated place.

c. Specific end use(s)
No data available.

SECTION 8: Exposure controls/ personal protection

a. Control parameters
Components with workplace control parameters.

b. Appropriate engineering controls
No data available.

c. Personal protective equipment

Hand protection
Protective gloves.

Eye protection
Tightly fitting safety goggles.

Skin and Body protection
Long sleeved clothing

Respiratory protection
No special protective equipment required.

Control of Environmental exposure
No data available.

SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

a. Appearance	Form: liquid Color: bright blue
b. Odor	No data available
c. Odor Threshold	No data available
d. pH	No data available
e. Melting point/freezing point	No data available
f. Initial boiling point and boiling range	100℃

g.	**Flash point**	No data available
h.	**Evaporation rate**	No data available
i.	**Flammability (solid, gas)**	No data available
j.	**Lower explosion limit**	No data available
k.	**Upper explosion limit**	No data available
l.	**Vapour pressure**	No data available
m.	**Vapour density**	No data available
n.	**Specific Gravity/Relative density**	No data available
o.	**Solubility**	Soluble in water
p.	**Partition coefficient: n-octanol / water**	No data available
q.	**Auto-ignition temperature**	No data available
r.	**Decomposition temperature**	No data available
s.	**Viscosity**	No data available
t.	**Dynamic viscosity**	No data available

Other safety information
No data available

SECTION 10: Stability and reactivity

a. Stability
Stable under recommended storage conditions.

b. Reactivity
No data available**.**

c. Possibility of hazardous reactions
No data available.

d. Conditions to avoid
No data available.

e. Incompatible materials
Strong oxidizing agents.

f. Hazardous decomposition products
No data available.

SECTION 11: Toxicological information

a. Delayed and immediate effects and also chronic effect from short and long term exposure

Acute toxicity
No data available.

Skin corrosion/irritation
No data available.

Serious eye damage/eye irritation
No data available.

Respiratory or skin sensitization
No data available.

Germ cell mutagenicity
No data available.

Carcinogenicity

IARC	No ingredient of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.

Reproductive toxicity
No data available.

Specific target organ toxicity – single exposure
No data available.

Specific target organ toxicity – repeated exposure
No data available.

Aspiration hazard
No data available.

Signs and Symptoms of Exposure
Absorption into the body leads to the formation of methemoglobin which in sufficient concentration causes cyanosis. Onset may be delayed 2 to 4 hours or longer., Vomiting, Diarrhea, Nausea, Dizziness, Headache.

Additional information
RTECS: Not available.

SECTION 12: Ecological information

a. **Toxicity**
No data available.

b. **Persistence and degradability**
No data available.

c. **Bioaccumulative potential**
No data available.

d. **Mobility in soil**
No data available.

e. **Other adverse effects**
No data available.

SECTION 13: Disposal considerations

a. **Disposal methods**
Offer surplus and non-recyclable solutions to a licensed disposal company. Contact a licensed professional waste disposal service to dispose of this material. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber.

b. **Contaminates packaging**
Dispose of as unused product.

SECTION 14: Transport information

UN number	ADR/RID: -	IMDG: -	IATA: -

UN proper shipping name	ADR/RID: Not dangerous goods	IMDG: Not dangerous goods	IATA: Not dangerous goods
Transport hazard class(es)	ADR/RID: -	IMDG: -	IATA: -
Packaging group	ADR/RID: -	IMDG: -	IATA: -
Environmental hazards	ADR/RID: no	IMDG Marine pollutant: no	IATA: no
Special precautions for user	No data available		

Further information
Not classified as dangerous in the meaning of transport regulations.

SECTION 15: Regulatory information

This safety datasheet complies with the requirements of Regulation (EC) No. 1907/2006.

a. **Regulation under the Occupational Safety and Health Ac**
No data available.

b. **Chemical safety assessment**
For this product, a chemical safety assessment was not carried out.

SECTION 16: Other information

Further information
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End of Safety Data Sheet