

# SAFETY DATA SHEET

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

- a. Product Name : Fluorescence Signal Enhancer 1
- Product Number : F23213
- 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  
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Dongan-gu, Anyang-si  
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Telephone: +82-31-478-4185  
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**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  
Not hazardous

### b. GHS-Labeling

Labeling according to Regulation (EC) No 1272/2008

Hazard pictograms



Signal word  
Warning

Hazard statements  
H302 – Harmful if swallowed  
H312 – Harmful in contact with skin  
H332 – Harmful if inhaled

Precautionary statements  
P261 – Avoid breathing dust/fumes/gas/mist/vapors/spray.

P264 – Wash skin 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 + 330 – IF SWALLOWED: Rinse mouth. Call a POISON CENTER or doctor/physician if you feel unwell.  
P302 + P312 + P352 – IF ON SKIN: Wash with plenty of water. Call a POISON CENTER or doctor/physician if you feel unwell.  
P304 + P312 + P340 – IF INHALED: Remove person to fresh air and keep comfortable for breathing. Call a POISON CENTER or doctor/physician if you feel unwell.  
P362 + P364 – Take off contaminated clothing and wash it before use.  
P501 – Dispose of contents/container to an approved waste disposal plant.

**c. Other hazard which do not result in classification**

None

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### SECTION 3: Composition/ Information on ingredients

**3b. Mixtures**

Component:	Sodium orthovanadate
Synonyms:	Trisodium tetraoxovanadate
Formula:	Na <sub>3</sub> O <sub>4</sub> V
CAS-No.:	13721-39-6
Weight%:	< 3%

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### SECTION 4: First aid measures

**a. In case of eye contact**

Rinse opened eye for several minutes under running water. Then consult a doctor.

**b. In case of skin contact**

Immediately wash with water and soap and rinse thoroughly. Seek immediate medical advice.

**c. If inhaled**

Supply fresh air. If required, provide artificial respiration. Keep the patient warm. Seek immediate medical advice.

**d. If swallowed**

Seek medical treatment.

**e. Indication of any immediate medical attention and special treatment needed**

No data available.

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### SECTION 5: Firefighting measures

**a. Suitable extinguishing media**

Use fire-fighting measures that suit the surrounding fire.

**b. Specific hazards arising from the chemical**

Sodium oxide, Metal oxide fume.

**c. Special protective actions for fire-fighters**

Wear self-contained respirators. Wear a fully protective impervious suit.

**d. Further information**

No data available.

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## SECTION 6: Accidental release measures

**a. Personal precautions, protective equipment and emergency procedures**

Wear protective equipment. Keep unprotected persons away.  
Ensure adequate ventilation.

**b. Environmental precautions**

Do not allow material to be released to the environment without proper governmental permits.  
Do not allow product to reach sewage system or any water course.  
Do not allow to penetrate the ground/soil.

**c. Methods and materials for containment and cleaning up**

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

**d. Reference to other sections**

For safe handling, see section 7.  
For personal protection equipment, see section 8.  
For disposal, see section 13.

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## SECTION 7: Handling and storage

**a. Precautions for safe handling**

Keep the container tightly sealed.

**b. Conditions for safe storage**

Requirements to be met by storerooms and receptacles: Refrigerate  
Protect from heat and water.

**c. Specific end use(s)**

No data available.

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## SECTION 8: Exposure controls/ personal protection

**a. Control parameters**

**Components with limit values that require monitoring at the workplace:**

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

**b. Appropriate engineering controls**

Handle in accordance with good industrial hygiene and safety practice.  
Wash hands before breaks and at the end of a workday.  
Maintain an ergonomically appropriate working environment.  
Remove all soiled and contaminated clothing immediately.

**c. Personal protective equipment**

**Hand protection**

Impervious gloves.

Check protective gloves prior to each use for their proper condition. The selection of suitable gloves not only depends on the material but also on quality.

**Eye protection**

Tightly fitting safety goggles.

**Skin and Body protection**

Protective work clothing.

**Respiratory protection**

Use suitable respirator when high concentrations are present.

**Control of Environmental exposure**

No data available.

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## SECTION 9: Physical and chemical properties

Information on basic physical and chemical properties

<b>a. Appearance</b>	Form: liquid Colour: colorless
<b>b. Odor</b>	No data available
<b>c. Odor Threshold</b>	No data available
<b>d. pH</b>	No data available
<b>e. Melting point/freezing point</b>	No data available
<b>f. Initial boiling point and boiling range</b>	100°C
<b>g. Flash point</b>	No data available
<b>h. Evaporation rate</b>	No data available
<b>i. Flammability (solid, gas)</b>	No data available
<b>j. Lower explosion limit</b>	No data available
<b>k. Upper explosion limit</b>	No data available
<b>l. Vapour pressure</b>	No data available
<b>m. Vapour density</b>	No data available
<b>n. Specific Gravity/Relative density</b>	No data available
<b>o. Solubility</b>	Fully miscible
<b>p. Partition coefficient: n-octanol / water</b>	No data available
<b>q. Auto-ignition temperature</b>	No data available
<b>r. Decomposition temperature</b>	No data available
<b>s. Viscosity</b>	No data available
<b>t. Dynamic viscosity</b>	No data available

**Other safety information**

No data available

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## SECTION 10: Stability and reactivity

- a. Stability**  
Stable under recommended storage conditions.
- b. Reactivity**  
No data available.
- c. Possibility of hazardous reactions**  
Water reacts violently with alkali metals. Reacts with alkaline earth metals.  
Water reacts with many metals to give hydrogen, often violently. Water is also incompatible with many reactive organic and inorganic chemicals.
- d. Conditions to avoid**  
No data available.
- e. Incompatible materials**

Heat.

**f. Hazardous decomposition products**

Sodium oxide, Metal oxide fume.

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**SECTION 11: Toxicological information**

**a. Information on likely routes of exposure**

**Inhalation**

May be harmful if inhaled. May cause respiratory tract irritation.

**Ingestion**

May be harmful if swallowed.

**Skin**

May cause skin irritation.

**Eyes**

May cause eye irritation.

**b. 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**

The Registry of Toxic Effects of Chemical Substances (RTECS) contains mutation data for components in this product.

**Carcinogenicity**

No data available.

**Reproductive toxicity**

The Registry of Toxic Effects of Chemical Substances (RTECS) contains reproductive data for components in this product.

**Specific target organ toxicity – single exposure**

No data available.

**Specific target organ toxicity – repeated exposure**

No data available.

**Aspiration hazard**

No data available.

**Additional information**

To the best of our knowledge, the chemical, physical, and toxicological properties have not been thoroughly investigated.

The product is not subject to classification according to internally approved calculation methods for preparations.

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**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. Results of PBT and vPvB assessment**  
No data available.
- f. Other adverse effects**  
No data available.

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### SECTION 13: Disposal considerations

- a. Disposal methods**  
Recommendation                      Consult state, local or national regulation to ensure proper disposal.
- b. Contaminates packaging**  
Recommendation                      Disposal must be made according to official regulations.  
Recommended cleansing agents      Water, if necessary, together with cleansing agents.

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### SECTION 14: Transport information

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

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### 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 Act**  
No data available.
- b. Chemical safety assessment**

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

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## **SECTION 16: Other information**

### **Further information**

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The above information is believed to be correct but does not purport to be all-inclusive and shall be used only as a guide. The information in this document is based on the present state of our knowledge and applies to the product with regard to appropriate safety precautions. It does not represent any guarantee of the properties of the product. Aligned Genetics, Inc. and its Affiliates shall not be held liable for any damage resulting from handling or contact with the above product. See the reverse side of the invoice or packing slip for additional terms and conditions of sale.

**End of Safety Data Sheet**