

SAFETY DATA SHEET

1. PRODUCT AND COMPANY IDENTIFICATION

Identification

Product Name LUNA™ Fluorescence Calibration Beads
Product Number F23102

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

Identified uses: Laboratory chemicals, Manufacture of substances

Manufacturer

Aligned Genetics, Inc.
FL 3, 28 Simindaero 327 beon-gil
Dongan-gu, Anyang-si
Gyeonggi-do 14055
South Korea
Telephone: +82-31-478-4185
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E-mail: sales@logosbio.com

Supplier

Aligned Genetics, Inc.
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Telephone: +82-31-478-4185
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Emergency telephone number +82 31 478 4185

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

2. HAZARDS IDENTIFICATION

[GHS classification]

Classification of the substance or mixture

Classification according to Regulation (EC) No 1272/2008
Not hazardous

Label elements

Labelling according Regulation (EC) No 1272/2008

Hazard pictograms None

Signal word Not hazardous

Hazard statements
Not hazardous

Precautionary statements
Not hazardous

Other hazards

The product contains no substances which at their given concentration, are considered to be hazardous to health. We recommend handling all chemicals with caution.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Mixtures

Component	Synonyms	Formula	CAS No.	Weight %
Solid polymer microspheres	Polystyrene or Polystyrene divinylbenzene or polymethylmethacrylate	$(C_8H_8)_n$ or $(C_{24}H_{24})_n$ or $[CH_2C(CH_3)(CO_2CH_3)]_n$	9003-53-6 or 9003-70-7 or 9011-14-7	< 1%
Sodium azide	Hydrazoic acid sodium salt	NaN_3	26628-22-8	< 0.002%

4. FIRST AID MEASURES

Description of first aid measures

In case of eye contact	In case of contact, immediately flush eyes with copious amounts of water for at least 15 minutes.
In case of skin contact	In case of contact, immediately wash skin with copious amounts of water for at least 15 minutes.
After inhalation	Remove to fresh air if effects occur. Consult medical personnel.
After swallowing	Contact physician immediately.
Indication of any immediate medical attention and special treatment needed	Human effects not established. No specific antidote. Treatment based on sound judgment of physician and the individual reactions of the patient.

5. FIRE-FIGHTING MEASURES

Extinguishing media

Suitable extinguishing media

Water spray. Carbon dioxide (CO₂). Foam. Dry chemical.

Special hazards arising from the substances or mixture

Suspended material is not flammable. Sodium azide is known to form explosive compounds when it is combined with metal halides and many heavy metals, such as lead, copper, gold, & silver.

Advice of fire-fighters

Protective equipment

Not applicable

Further information

No data available

6. ACCIDENTAL RELEASE MEASURES

Personal precautions, protective equipment, and emergency procedures

Any information given below is considered to be in addition to internal guidelines for isolation of spill, containment of spill, removal of ignition source from the immediate area, and collection for disposal of a spill by trained, properly protected clean up personnel. Wear vinyl gloves, soak up spill in paper toweling, and rinse area with water. Put all generated waste into an approved container and dispose of as waste. Observe all applicable federal, state, and local disposal laws.

Environmental precautions

No special measures are indicated.

Methods and materials for containment and cleaning up

No special measures are indicated.

Reference to other sections

For disposal see section 13.

7. HANDLING AND STORAGE

Precautions for safe handling

Respiratory Protection: None normally needed. In cases where there is a likelihood of inhalation exposure to dried particles, wear a NIOSH-approved dust respirator.

Conditions for safe storage, including any incompatibilities

Ventilation: Good room ventilation is adequate for most operations.

Respiratory Protection: None normally needed. In cases where there is a likelihood of inhalation exposure to dried particles, wear a NIOSH-approved dust respirator.

Storage: Store at 4-8°C. Keep refrigerated. Do not freeze. Keep container closed and fluorescent particles protected from light.

Specific end use(s)

No data available

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

Control parameters

Respiratory Protection: None normally needed.

Wash / Hygienic Practices: Wash with soap and water when leaving work area and before eating, smoking, and using restroom facilities.

Exposure controls

Appropriate engineering controls

Ensure adequate ventilation, especially in confined areas.

Personal protective equipment

Respiratory protection	In case of insufficient ventilation wear suitable respiratory equipment.
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Hand protection	Handle with impervious gloves. Chemical-resistant gloves should be worn whenever this material is handled. Gloves should be removed and replaced immediately if there is any indication of degradation or chemical breakthrough. Rinse and remove gloves immediately after use. Wash hands with soap and water.
Eye protection	Safety glasses with side-shields.
Skin and Body protection	Lightweight protective clothing.
Control of Environmental exposure	Prevent further leakage or spillage if safe to do so. Do not let product enter drains.

9. PHYSICAL AND CHEMICAL PROPERTIES

Information on basic physical and chemical properties

Appearance	Form: translucent liquid suspension
Odour	No data available
Odour Threshold	No data available
pH	No data available
Melting point/freezing point	No data available
Initial boiling point and boiling range	100°C
Flash point	No data available
Evaporation rate	No data available
Flammability (solid, gas)	No data available
Upper/lower flammability or explosive limits	No data available
Vapour pressure	No data available
Vapour density	No data available
Specific Gravity/Relative density	No data available
Solubility	Dispersible in water
Partition coefficient: n-octanol / water	No data available
Auto-ignition temperature	No data available
Decomposition temperature	No data available
Viscosity	No data available
Dynamic viscosity	No data available

Other safety information

No data available

10. STABILITY AND REACTIVITY

Stability

Stability Stable under recommended storage conditions.
Reactivity No data available

Possibility of hazardous reactions

No data available

Conditions to avoid

Product may irreversibly aggregate if frozen.

Incompatible materials

No dangerous reaction known under conditions of normal use

Hazardous decomposition products

Sodium azide is known to form explosive compounds when it is combined with metal halides and many heavy metals, such as lead, copper, gold, & silver.

11. TOXICOLOGICAL INFORMATION

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 component of this product present at levels greater than or equal to 0.1% is identified as probable, possible or confirmed human carcinogen by IARC.
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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

Potential health effects

Inhalation	May be harmful if inhaled. May cause respiratory tract irritation.
Ingestion	May be harmful if swallowed.
Skin	May be harmful if absorbed through skin. May cause skin irritation.
Eyes	May cause eye irritation.

Additional Information

To the best of our knowledge, the chemical, physical, and toxic properties of this product have not been thoroughly investigated. Sodium azide is known to be highly toxic. Sodium azide may result in eye and skin irritation. Ingestion may result in nausea, headache, and vomiting. Sodium azide can cause cancer, or alter genetic material. Target organs include heart, nerves, and brain.

12. ECOLOGICAL INFORMATION

Toxicity

No data available

Persistence and degradability

No data available

Bioaccumulative potential

No data available

Mobility in soil

No data available

Results of PBT and vPvB assessment

No data available

Other adverse effects

No data available

13. DISPOSAL CONSIDERATIONS

Waste treatment methods

The following chart lists the status of the chemical and its components in reference to 40 CFR Part 261.33. If the product is listed by code number, the substance may be subject to special federal and state disposal regulations. If no codes are listed, the material must be disposed of in compliance with all Federal, State, and Local Regulations.

Product

CAS#	Waste Code	Regulated Name
9003-53-6	Not listed	Not listed
9003-70-7	Not listed	Not listed

9011-14-7	Not listed	Not listed
26628-22-8	P105	Sodium azide

Contaminated packaging

Dispose of as unused product.

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: -	IMDG: -	IATA: -
Special precautions for user	No data available		

15. REGULATORY INFORMATION

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

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

No data available

Chemical safety assessment

No data available

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 is applicable 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 invoice or packing slip for additional terms and conditions of sale.

End of Safety Data Sheet