

SAFETY DATA SHEET

Version 1

Section 1: Identification of Product and Company

1.1 Product Identifiers

Product Name: **Thermal Initiator**
Manufacturer: ClearLight Biotechnologies

1.2 Relevant identified uses of substance and uses advised against

Identified uses: Laboratory reagent, For Research Use Only.

1.3 Details of the supplier of the safety data sheet

Company: ClearLight Biotechnologies, Inc.
428 Oakmead Parkway
Sunnyvale, CA 94085
Telephone: (800) 251-8905
Email address: contact@clearlightbiotech.com

1.4 Emergency telephone number

Emergency phone: (800) 251-8905

Section 2: Hazards identification

2.1 Classification of substance

GHS Classification in accordance with 29 CFR 1910 (OSHA HCS)

Skin sensitization (Category 1), H317

2.2 GHS Label elements, including precautionary statements



Pictogram:

Signal Word: Warning

Hazard Statement(s):

H317: May cause an allergic skin reaction.

Prevention Statement(s):

P261: Avoid breathing dust.



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P272: Contaminated work clothing should not be allowed out of the workplace.

P280: Wear protective gloves and clothing.

Response Statement(s):

P302+P352: IF ON SKIN: Wash with plenty of soap and water.

P333+P313: If skin irritation or rash occurs: Get medical advice/attention.

P363: Wash contaminated clothing before reuse.

Disposal Statement(s):

P501: Dispose of contents/container in accordance with local/regional/national/international regulations.

2.3 Hazards not otherwise classified (HNOC) or not covered by GHS – none

Section 3: Composition/information on ingredients

3.1 Substance

Component	CAS Number	Concentration
VA-044 Initiator	27776-21-2	25-99% ¹

¹ - Exact concentrations withheld as trade secrets

Section 4: First Aid measures

4.1 Description of first aid measures

General advice

Consult a physician. Show this safety data sheet to the doctor in attendance. Move out of dangerous area.

If inhaled

If breathed in, move person into fresh air. If symptoms persist, consult a physician.

In case of skin contact

Wash off with soap and plenty of water. If symptoms persist, consult a physician.

In case of eye contact

Rinse thoroughly with plenty of water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing. Immediate medical attention is required.

If swallowed

Never give anything by mouth to an unconscious person. Rinse mouth with water. Call a physician or poison control immediately. Do not induce vomiting without medical advice.

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in the labelling (see section 2.2) and/or in section 11.

4.3 Indication of any immediate medical attention and special treatment needed

No data available.

Section 5: Firefighting measures

5.1 Extinguishing media

Suitable extinguishing media

Water spray (fog), Carbon dioxide (CO₂), Foam, Extinguishing powder, Sand.

5.2 Special hazards arising from the substance or mixture

Thermal decomposition can lead to release of irritating and toxic gases and vapors.

5.3 Advice for firefighters

Use personal protective equipment as required. Firefighters should wear self-contained breathing apparatus and full firefighting turnout gear.

5.4 Further Information

No data available.

Section 6: Accidental release measures

6.1 Personal precautions, protective equipment and emergency procedures

For indoor, provide adequate ventilation process until the end of working. Deny unnecessary entry other than the people involved by, for example, using a rope. While working, wear appropriate protective equipment to avoid adhering it on skin, or inhaling the gas. Work from windward, and retract the people downwind.

6.2 Environmental precautions

To be careful not discharged to the environment without being properly handled waste water contaminated.

6.3 Methods and materials for containment and cleaning up

Sweep up and gather scattered particles, and collect it in an empty airtight container.

6.4 Reference to other sections

For disposal see section 13.

Section 7: Handling and storage



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7.1 Precautions for safe handling

Avoid contact with skin, eyes, or clothing. Use personal protective equipment as required. Avoid contact with strong acids, especially strong oxidizing agents. Use with local exhaust ventilation. When handling, pay particular attention to static electricity ignition source, such as a shock spark. Avoid long-term and repeated exposure. Pay attention not to give shock.

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed and protected from light in a well-ventilated place at room temperature, preferably cool. Store in Polyethylene or Polypropylene container. Incompatible with strong oxidizing agents.

7.3 Specific end use(s)

Aside from the uses mentioned in section 1.2, no other specific uses are specified.

Section 8: Exposure controls/personal protection

8.1 Control parameters

Components with limit values that require monitoring at the workplace: Not required.

8.2 Exposure controls

Personal protective equipment

Skin protection

Handle with gloves and dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands after use or handling.

Recommended glove material: Nitrile rubber

Advisory recommendation only.

Eye protection

Protective eyeglasses or chemical safety goggles.

Body Protection

Long-sleeved work clothes and protective boots.

Respiratory protection

Dust mask.

General hygiene

Wash contaminated clothing before reuse.

Section 9: Physical and chemical properties

9.1 Information on basic physical and chemical properties

Appearance:	White powder
Odor:	Light, characteristic
Odor Threshold:	No data available
pH as supplied:	5.5 - 6.5
Melting point:	No data available
Freezing point:	No data available
Boiling point:	No data available
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
Vapor pressure:	No data available
Vapor density:	No data available
Relative density:	No data available
Water solubility:	Water: Soluble
Partition coefficient:	No data available
Auto-ignition temperature:	No data available
Decomposition temperature:	SADT: 140°C
Viscosity:	No data available
Explosive properties:	No data available
Oxidizing properties:	No data available

9.2 Other safety information

No data available.

Section 10: Stability and reactivity

10.1 Reactivity

No data available.

10.2 Chemical stability

Hygroscopic. May be altered by light. Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions



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Decompose at an accelerating pace and discharge nitrogen gas. May cause runaway reaction by heat or sunlight because of self-reactivity. Decompose gradually if stored it higher than 30°C.

10.4 Conditions to avoid

Extremes of temperature and direct sunlight, Moisture.

10.5 Incompatible materials

Strong oxidizing agents.

10.6 Hazardous decomposition products

Carbon monoxide (CO), Carbon dioxide (CO₂), Nitrogen oxides (NO_x), nitrogen gas, Hydrogen chloride (HCl) gas.

Section 11: Toxicological information

11.1 Information on toxicological effects

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

No data available

Reproductive toxicity

No data available

Specific target organ toxicity - single exposure

No data available

Specific target organ toxicity - repeated exposure



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No data available

Aspiration hazard

No data available

Additional Information

RTECS: Not available

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

Section 12: Ecological information

12.1 Toxicity

No data available

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 Other adverse effects

No data available.

Section 13: Disposal considerations

13.1 Waste treatment methods

Waste from residues

Disposal should be in accordance with applicable regional, national and local laws and regulations.

Contaminated container and contaminated packaging

Disposal should be in accordance with applicable regional, national and local laws and regulations.



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Section 14: Transport information

DOT (US)

Not dangerous goods.

IMDG

Not dangerous goods.

IATA

Not dangerous goods.

Section 15: Regulatory information

SARA 302 Components

This material does not contain any components with a section 302 EHS TPQ.

SARA 313 Components

This material does not contain any chemical components with known CAS numbers that exceed the threshold (De Minimis) reporting levels established by SARA Title III, Section 313.

SARA 311/312 Hazards

Acute Health Hazard

California Prop. 65 Components

This product does not contain any chemicals known to State of California to cause cancer, birth defects, or any other reproductive harm.

Section 16: Other information

Further Information:

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