Section 1 – Identification: product identifier and chemical identity

Product name: SyncleRef™ 165 nm
Technical description: Reference synthetic vesicles (non-fluorescent), 165 nm nominal size
Identified use: For research use only (RUO). Not intended for use in humans or diagnostic purposes
Company: Vesiculate Pty Ltd (ABN 94 664 755 060)
Address: Room 103, Level 1, E10 Hilmer Building, Union Rd, UNSW Sydney, NSW 2052, Australia
E-mail: info@vesiculate.com

Section 2 – Hazard(s) identification

GHS Classification:
Not a hazardous substance or mixture
GHS Label elements, including precautionary statements:
Not a hazardous substance or mixture
Caution - substance not yet tested completely
HMIS Classification:
Health Hazard: 0
Flammability: 0
Physical Hazards: 0
NFPA Rating:
Health Hazard: 0
Fire: 0
Reactivity Hazard: 0
Potential health effects:
Inhalation: May be harmful if inhaled. May cause respiratory tract irritation.
Skin: May be harmful if absorbed through skin. May cause skin irritation.
Eyes: May cause eye irritation.
Ingestion: May be harmful if swallowed

Section 3 – Composition and information on ingredients

Substance/Mixture:
Mixture

Component:

Proprietary organic material suspended in water at a concentration of <1% by mass.

Section 4 – First aid measures

If inhaled:

If breathed in, move person into fresh air. If not breathing, give artificial respiration.

In case of skin contact:

Wash off with soap and plenty of water.

In case of eye contact:

Flush eyes with plenty of water for at least 15 minutes and consult a physician.

If swallowed:

If the person is conscious, rinse their mouth out with water. Never give anything by mouth to an unconscious person.

Section 5 – Firefighting measures

Suitable extinguishing media:

Product is not flammable. Use water spray, dry chemical or carbon dioxide fire extinguishers.

Special hazards arising from the substance or mixture:

Nature of decomposition products not known.

Advice for firefighters:

Wear self-contained breathing apparatus for firefighting if necessary.

Further information:

No data available.

Section 6 – Accidental release measures

Personal precautions, protective equipment and emergency procedures:

Avoid breathing vapors, mist or gas.

Environmental precautions:

Do not let product enter drains.

Methods and materials for containment and cleaning up:

Cover drains. Soak up with inert absorbent material. Keep in suitable, closed containers for disposal.

Section 7– Handling and storage, including how the chemical may be safely used

Precautions for safe handling:

No special handling advice required.

Conditions for safe storage:

Storage conditions: Keep container tightly closed in a dry and well-ventilated place.

Storage stability: Recommended storage temperature of 4 °C for long-term storage. Room temperature storage is sufficient for routine, short-term use. Do not freeze.

Specific end use(s):

Apart from the uses mentioned in Section 1, no other specific uses are stipulated

Section 8 – Exposure controls and personal protection

Control parameters:

Ingredients with workplace control parameters: Contains no substances with occupational exposure limit values.

Exposure controls:

Appropriate engineering controls: General industrial hygiene practice.

Personal protective equipment:

- **Eye/face protection:** Use protective eyewear or face shield tested and approved under appropriate government standards.
- **Skin protection:** Handle with chemical-resistant gloves.
- **Body Protection:** Choose body protection according to the specific workplace.
- **Respiratory protection:** Respiratory protection is not required.

Section 9 – Physical and chemical properties

Information on basic physical and chemical properties:

- **Appearance:** Clear, transparent liquid
- **Odor:** No data available
- **Melting point/freezing point:** No data available
- **Boiling point:** No data available
- **Flammability:** No data available

- **Upper/lower flammability or explosive limits:** No data available
- **Flash point:** No data available
- **Autoignition temperature:** No data available
- **Decomposition temperature:** No data available
- **pH:** Between 6-8
- **Viscosity:** No data available
- **Water solubility:** No data available
- **Partition coefficient:** No data available
- **Vapor pressure:** No data available
- **Density:** No data available
- **Relative density:** No data available
- **Relative vapor density:** No data available
- **Explosive properties:** No data available
- **Oxidizing properties:** No data available

Section 10 – Stability and reactivity

Reactivity: No data available.
Chemical stability: Stable for 6 months under recommended storage conditions.
Possibility of hazardous reactions: No data available.
Thermal decomposition: No data available.
Conditions to be avoided: Freezing causes irreversible sample damage.
Materials to be avoided: No data available.
Dangerous reactions: No data available.

Section 11 – Toxicological information

Acute toxicity:

- **Oral:** No data available
- **Inhalation:** No data available
- **Dermal:** 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: 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 toxicological properties have not been thoroughly investigated.

Section 12 – Ecological information

Aquatic/terrestrial organism toxicity: No data available.

Aspiration hazard: No data available.

Persistence and degradability: No data available.

Bioaccumulative potential: No data available.

Mobility in soil: No data available.

PBT and vPvB assessment: No data available.

Other adverse effects: No data available.

Section 13 – Disposal considerations

Waste treatment methods:

- **Product:** Offer surplus and non-recyclable solutions to a licensed disposal company.

Section 14 – Transport information

UN proper shipping name:

- **ADR/RID:** Not dangerous goods

- **DOT (US):** Not dangerous goods
- **IMDG:** Not dangerous goods
- **IATA-DGR:** Not dangerous goods

Section 15 – Regulatory information

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

- **Therapeutic Goods (Poisons Standard) Instrument:** No poison schedule number allocated

Section 16 – Any other relevant information

Date of the latest revision: 08 January 2026

Further information: The information provided is believed to be accurate but not comprehensive, and should only be used as a guideline based on our current understanding of the chemical substance or mixture, with consideration to appropriate safety measures. It does not offer any guarantee regarding the product's properties. Neither Vesiculate nor its affiliates will be liable for any damages arising from handling or contact with the product.

END OF DOCUMENT