

SAFETY DATA SHEET



SECTION 1: IDENTIFICATION

Product Name VSE™-003, VSE™-003-S, VSE™-003-C
Product Number 103110, 103120, 103100
Recommended Use For research and process development use only.
Restrictions on Use Not for human or veterinary use.

Company Information Virica Biotech Inc.
7 Bayview Station Road
Ottawa, ON, K1Y 2C5
Canada

Emergency Contact T: +1 613-608-7924 (09:00-17:00 EST)

SECTION 2: HAZARDOUS IDENTIFICATION

GHS Classification GHS Classification in accordance with 29 CFR 1910 (OSHA HCS).
Germ Cell Mutagenicity, Category 2
Skin corrosion/irritation, Category 2
Serious eye damage/ irritation, Category 2A
Specific target organ toxicity, single exposure; Respiratory tract irritation, Category 3
Acute toxicity, oral, Category 4

GHS Label Elements

Product Name VSE™-003, VSE™-003-S, VSE™-003-C

Pictogram



Signal word Warning

Hazard statement(s)

H302	Harmful if swallowed.
H315	Causes skin irritation.
H319	Causes serious eye irritation.
H335	May cause respiratory irritation.
H341	Suspected of causing genetic defects.
Precautionary statement(s)	
P201	Obtain special instructions before use.
P202	Do not handle until all safety precautions have been read and understood.
P261	Avoid breathing dust/fume/gas/mist/vapours/spray.
P264	Wash hands thoroughly after handling. Wash skin thoroughly after handling.
P271	Use only outdoors or in a well-ventilated area.
P280	Wear protective gloves/protective clothing/eye-protection/face protection.
P281	Use personal protective equipment as required.
P302+P352	IF ON SKIN: wash with plenty of water.
P304+P340	IF INHALED: Remove victim to fresh air and keep at rest in a position comfortable for breathing.

P305+P351+P338	IF IN EYES: Rinse cautiously with water for several minutes. Remove contact lenses, if present and easy to do. Continue rinsing.
P312	Call a POISON CENTER or doctor/physician if you feel unwell.
P332+P313	IF SKIN irritation occurs: Get medical advice/attention.
P337+P313	IF eye irritation persists: Get medical advice/attention.
P362	Take off contaminated clothing and wash before reuse.
P403+P233	Store in a well-ventilated place. Keep container tightly closed.
P405	Store locked up.
P501	Dispose of contents/container in accordance with local/regional/national regulations.

Other Hazards None
Additional Information No additional information.

SECTION 3: COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name/ Component	CAS No.	Concentration
Proprietary Heterocyclic compounds with nitrogen hetero-atom(s) only, other (VSETM-003, VSETM-003-S, VSETM-003-C)	Trade Secret	Trade Secret

SECTION 4: FIRST AID MEASURES

First Aid Measures

Inhalation	Immediately relocate self or casualty to fresh air. If breathing is difficult, give cardiopulmonary resuscitation (CPR). Avoid mouth-to-mouth resuscitation. Seek medical attention.
Skin Contact	Rinse skin thoroughly with large amounts of water for at least 15 minutes. Remove contaminated clothing and shoes and call a physician. Seek medical attention.
Eye Contact	Remove any contact lenses, locate eye-wash station, and flush eyes immediately with large amounts of water for at least 15 minutes. Separate eyelids with fingers to ensure adequate flushing. Seek medical attention.
Ingestion	Wash out mouth with water; Do NOT induce vomiting. Seek medical attention.

Most Important Symptoms and Effects

The most important known symptoms and effects are described in the labelling (see section 2).

Immediate medical attention and special treatment needed, if necessary

Treat symptomatically.

SECTION 5: FIRE FIGHTING MEASURES

Extinguishing Media

Suitable Extinguishing Media Use water spray, dry chemical, carbon dioxide (CO₂), alcohol resistant foam.

Unsuitable Extinguishing Media No information available.

Specific Hazards Arising from the Hazardous Product

Keep product and empty container away from heat and sources of ignition.

Hazardous combustion products include Carbon monoxide (CO), Carbon dioxide (CO₂), nitrogen oxides (No_x), and Hydrogen chloride gas.

Special Protective Equipment and Precautions for Fire-Fighters

Wear self-contained breathing apparatus and full protective clothing (NIOSH- approved or equivalent). Fight fire from a safe distance and with normal precautions.

NFPA

Health	Flammability	Instability	Physical Hazards
2	1	0	N/A

SECTION 6: ACCIDENTAL RELEASE MEASURES

Personal Precautions, Protective Equipment and Emergency Procedures

Use full personal protective equipment. Avoid breathing vapors, mist, dust or gas. Ensure adequate ventilation. Evacuate personnel to safe areas. Refer to protective measures listed in sections 8.

Environmental Precautions

Try to prevent further leakage or spillage. Keep the product away from drains or water courses.

Method 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. Dispose of contaminated material according to Section 13.

SECTION 7: HANDLING AND STORAGE

Precautions for safe handling

Avoid inhalation of dusts, mists, or aerosols. Avoid contact with eyes and skin. Use only in well-ventilated areas with appropriate local exhaust ventilation. Follow good industrial hygiene practices.

Conditions for safe storage

Keep container tightly sealed in cool, dry, well-ventilated area. Keep away from direct sunlight, sources of ignition, incompatible materials, and strong oxidizing agents.

Storage Temperature Room temperature, -80°C upon dissolution.

Storage Life Not determined. Stability studies are ongoing. Contact us for more information.

Specific End Use(s) For research and development use only. Not for human or veterinary use.

SECTION 8: EXPOSURE CONTROL / PERSONAL PROTECTION

Control Parameters

Chemical Name	ACGIH TLV	OSHA PEL	NIOSH IDLH
VSE™-003, VSE™-003-S, VSE™-003-C	Not established	Not established	Not established

Appropriate Engineering Controls

Engineering Measures	Ensure that eyewash stations and safety showers are close to the workstation location. Ensure adequate ventilation, especially in confined areas. Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of workday.
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Individual Protection Measures

Eye/Face Protection	Wear appropriate protective eyeglasses or chemical safety goggles as described by OSHA's eye and face protection regulations in 29 CFR 1910.133.
Skin and Body Protection	Protective gloves suitable for chemical handling (e.g., nitrile) and lab coat or other appropriate chemical-resistant protective clothing.
Respiratory Protection	Not normally required under standard laboratory conditions. Use a NIOSH-approved respirator if engineering controls are insufficient or during spill response.
Hygiene Measures	Wash hands thoroughly after handling. Do not eat, drink, or smoke when using this product. Remove contaminated clothing and wash before reuse. Provide regular cleaning of equipment, work area and clothing.

SECTION 9: PHYSICAL AND CHEMICAL PROPERTIES

Physical State	Solid
Appearance	White Solid
Color	White
Odor	No data available.
Odor Threshold	No data available.
Property	
Melting Point/Freezing point	399.2 – 402.8 °F
Boiling point/ boiling range	No data available.
Flash Point	No data available.
Flammability	No data available.
Evaporation Rate	No data available.
Flammability (solid, gas)	No data available.
Flammability Limits in Air	No data available.
Upper Flammability Limit	No data available.
Lower Flammability Limit	No data available.
Vapour Pressure	No data available.
Vapour Density	No data available.

Specific Gravity	No data available.
Water Solubility	No data available.
Solubility in Other Solvents	Soluble in 100% DMSO at 25mM
Partition Coefficient: n-octanol/water	Log Pow: 1.45
Autoignition Temperature	No data available.
Kinematic Viscosity	No data available.
Dynamic Viscosity	No data available.
Explosive Properties	No data available.
Oxidizing Properties	No data available.

Other Information

Softening Point	No data available.
VOC Content (%)	No data available.
Particle Size	No data available.
Particle Size Distribution	No data available.

SECTION 10: STABILITY AND REACTIVITY

Reactivity	No data available.
Chemical stability	Stable under recommended storage conditions.
Possibility of hazardous reactions	No data available.
Conditions to avoid	Avoid heat, sources of ignition, and incompatible materials.
Incompatible materials	Strong oxidizing agents.
Hazardous decomposition products	Carbon monoxide (CO), Carbon dioxide (CO ₂), nitrogen oxides (No _x), and Hydrogen chloride gas.

SECTION 11: TOXOLOGICAL INFORMATION

Information on Likely Routes of Exposure

Inhalation	Irritating to respiratory system. May be harmful if inhaled
Eye Contact	Irritating to eyes.
Skin Contact	Causes skin irritation. May be harmful in contact with skin.
Ingestion	May be harmful if swallowed. Ingestion may cause gastrointestinal irritation, nausea, vomiting and diarrhea.

Component Information

Chemical Name	LD50 Oral	LD50 Dermal	LC50 Inhalation
VSE™-003, VSE™-003-S, VSE™-003-C	No data available.	No data available.	No data available.

Information on Toxicological Effects

Symptoms	Symptoms may include redness, irritation, and discomfort to the skin and eyes. Inhalation may cause respiratory tract irritation.
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Delayed and Immediate Effects as Well as Chronic Effects from Short and Long-Term Exposure

Sensitization	No data available.
Mutagenic Effects	Statistically significant and reproducible increases in revertant colony counts were observed in <i>Salmonella typhimurium</i> strains TA100 and TA1535 in the absence of metabolic activation (-S9)
Carcinogenicity	No data available.

Chemical Name	ACGIH	IARC	NTP	OSHA
VSE™-003, VSE™-003-S, VSE™-003-C	Not listed	Not listed	Not listed	Not listed

Reproductive Toxicity	No data available.
STOT - Single Exposure	Category 3. Respiratory system.
STOT – Repeated Exposure	
Chronic Toxicity	No data available.
Target Organ Effects	No data available.

Aspiration Hazard Not classified as an aspiration hazard.

Numerical Measure of Toxicity – Product Information

The following values are calculated based on chapter 3.1 of the GHS document

ATEmix (oral)	Not applicable.
ATEmix (inhalation-dust/mist)	Not applicable.

Germ Cell Mutagenicity

Bacterial reverse mutation assay (AMES test)	Positive Statistically significant and reproducible increases in revertant colony counts were observed in <i>Salmonella typhimurium</i> strains TA100 and TA1535 in the absence of metabolic activation (-S9) for concentrations higher than 1 mM . No <i>in vivo</i> mutagenicity data available.
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SECTION 12: ECOLOGICAL INFORMATION

Ecotoxicity	Do not empty into drains.
Persistence and Degradation	No data available.
Bioaccumulation Potential	No data available.
Mobility in Soil	No data available.
Other Adverse Effects	No data available.

SECTION 13: DISPOSAL CONSIDERATIONS

Disposal Methods	Dispose substance in accordance with prevailing country, federal, state and local regulations.
Contaminated Packaging	Conduct recycling or disposal in accordance with prevailing country, federal, state and local regulations. Empty containers may retain residue and should be handled with appropriate precautions.

SECTION 14: TRANSPORT INFORMATION

UN Number	Not regulated.
UN Proper Shipping Name	Not regulated.
Transport Hazard Class(es)	Not regulated.
Packing Group	Not applicable.
Environmental Hazards	Not applicable.
Transport in Bulk	Not applicable.
Special Precautions	No special precautions required.

SECTION 15: REGULATORY INFORMATION

Chemical Inventories

TSCA	The chemical substance is subject to the Toxic Substances Control Act (TSCA). The specific chemical identity may be withheld as a trade secret in accordance with TSCA requirements.
DSL/NDSL	Not determined.

U.S. Federal Regulations

SARA 313

Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA). This product does not contain any chemicals which are subject to the reporting requirements of the Act and Title 40 of the Code of Federal Regulations, Part 372.

SARA 311/312 Hazard Categories

This product does not contain any chemicals subject to the reporting requirements of Section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986 (SARA) and 40 CFR Part 372.

Acute Health Hazard	Yes
Chronic Health Hazard	Yes
Fire Hazard	No
Sudden Release of Pressure Hazard	No
Reactive Hazard	No

Clean Water Act

This product does not contain any substances regulated as pollutants pursuant to the Clean Water Act (40 CFR 122.21 and 40 CFR 122.42).

CERCLA

This material, as supplied, does not contain any substances regulated as hazardous substances under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) (40 CFR 302) or SARA (40 CFR 355). There may be specific reporting requirements at the local, regional, or state level pertaining to releases of this material.

EPA Statement

This product is intended for research and development use only and is not intended for commercial, consumer, or environmental release.

California Proposition 65

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

SECTION 16: OTHER INFORMATION

Revision Date	14 April 2026
Version	1.0
Reason for Revision	Initial Issue.
Additional Information	None.

Disclaimer

The information provided in this Safety Data Sheet is believed to be accurate and represents the best information currently available to us. However, no warranty, express or implied, is made regarding the accuracy or completeness of this information. The information is intended to provide guidance for safe handling, use, processing, storage, transportation, disposal, and release and is not to be considered a warranty or quality specification.