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

Product code A-H500-01
Product name HUVEC

Company/undertaking identification

SMSbiotech
1825 Diamond Street
Suite 101
San Marcos, CA 92078
+1-760-290-3406

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

SECTION 2: Hazards identification**GHS - Classification****Signal Word**

Not Hazardous

Health hazards

Not Hazardous

Physical hazards

Not Hazardous

Principle Routes of Exposure**Potential Health Effects**

eyes

May cause eye irritation with susceptible persons.

Skin

May cause skin irritation in susceptible persons.

inhalation

May be harmful by inhalation.

Ingestion

May be harmful if swallowed.

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Specific effects

Carcinogenic effects	None
Mutagenic effects	None
Reproductive toxicity	None
Sensitization	None

Target Organ Effects No known effects under normal use conditions

HMIS

Health	0
Flammability	0
Reactivity	0

SECTION 3: Composition/information on ingredients

Chemical Name	CAS-No	EINECS-No	Weight %
Ammonium meta-Vanadate	7803-55-6	-	<0.01
Tin compounds	-	Not Listed	<0.01
Sodium selenite	10102-18-8	-	<0.00011

The product contains no substances which at their given concentration, are considered to be hazardous to health.

SECTION 4: First aid measures

Skin contact	Rinse cautiously with water for several minutes. If symptoms occur, obtain medical advice.
Eye contact	Rinse immediately with plenty of water, also under the eyelids, for at least 15 minutes. If symptoms persist, call a physician.
Ingestion	Never give anything by mouth to an unconscious person. If symptoms persist, call a physician. Do not induce vomiting without medical advice.
inhalation	Remove to fresh air. If symptoms persist, call a physician. If not breathing, give artificial respiration.
Notes to Physician	Treat symptomatically.

SECTION 5: Firefighting measures

Suitable extinguishing media	Water spray. Carbon dioxide (CO ₂). Foam. Dry chemical.
Special protective equipment for firefighters	Wear self-contained breathing apparatus and protective suit.

SECTION 6: Accidental release measures

Personal precautions	Use personal protection equipment.
Methods for cleaning up	Soak up with inert absorbent material.

Environmental precautions

Prevent further leakage or spillage if safe to do so.

See Section 12 for more information.

SECTION 7: Handling and storage

Handling	Always wear recommended Personal Protective Equipment. No special handling advices are necessary.
Storage	Keep in a dry, cool and well-ventilated place.

SECTION 8: Exposure controls/personal protection

Exposure Limits

Chemical Name	OSHA PEL	OSHA PEL (Ceiling)	ACGIH OEL (TWA)	ACGIH OEL (STEL)
Ammonium meta-Vanadate	None	None	None	None
Tin compounds	2 mg/m ³	None	2 mg/m ³	None
Sodium selenite	0.2 mg/m ³	None	0.2 mg/m ³	None

Engineering measures Ensure adequate ventilation, especially in confined areas.

Personal Protective Equipment

Personal Protective Equipment requirements are dependent on the user institution's risk assessment and are specific to the risk assessment for each laboratory where this material may be used.

Respiratory protection In case of insufficient ventilation, wear suitable respiratory equipment.

Hand protection Impervious gloves.

Eye protection Wear safety glasses with side shields (or goggles).

Skin and Body Protection Lightweight protective clothing.

Hygiene measures Handle in accordance with good industrial hygiene and safety practice.

Environmental exposure controls Prevent product from entering drains.

SECTION 9: Physical and chemical properties

General information

Form	Liquid
Appearance	No information available
Odor	No data available
Odor Threshold	No data available
Boiling point / boiling range	°C No data available °F No data available
Melting point / melting range	°C No data available °F No data available
flash point	°C No data available °F No data available
Autoignition Temperature	°C No data available °F No data available
Oxidizing properties	No information available
Water solubility	soluble
Viscosity	No data available

SECTION 10: Stability and reactivity

Stability Contact with acids or bleach liberates toxic gases. DO NOT ADD acids or bleach to any liquid wastes containing this product.

Materials to avoid sodium hypochlorite.
Hazardous decomposition products None under normal use conditions.
polymerization Hazardous polymerization does not occur.

SECTION 11: Toxicological information

Acute Toxicity

Chemical Name	LD50 (oral, rat/mouse)	LD50 (dermal, rat/rabbit)	LC50 (inhalation, rat/mouse)
Ammonium meta-Vanadate	No data available	2102 mg/kg (Rat)	=7800µg/m ³ (Rat)
Tin compounds	No data available	No data available	No data available
Sodium selenite	= 7 mg/kg (Rat)	No data available	No data available

Principle Routes of Exposure

Potential Health Effects

eyes May cause eye irritation with susceptible persons.
Skin May cause skin irritation in susceptible persons.
inhalation May be harmful by inhalation.
Ingestion May be harmful if swallowed.

Carcinogenic effects None.
Mutagenic effects None.
Reproductive toxicity None.
Sensitization None.

Target Organ Effects No known effects under normal use conditions

SECTION 12: Ecological information

Ecotoxicity Daphnia magna.
Mobility No information available.
Biodegradation Inherently biodegradable.
Bioaccumulation Material does not bioaccumulate.

Chemical Name	Freshwater Algae Data	Water Flea Data	Freshwater Fish Species Data	Microtox Data	log Pow
Tin compounds		Daphnia magna EC50=55 mg/L (48 h)			

SECTION 13: Disposal considerations

Dispose of contents/containers in accordance with local regulations.

SECTION 14: Transport information

IATA

Proper Shipping Name No dangerous good in sense of these transport regulations
Hazard Class None
Subsidiary class None
Packing group None

UN-No None

SECTION 15: Regulatory information

Component	TSCA
Ammonium meta-Vanadate 7803-55-6 (<0.01)	Listed
Tin compounds (<0.01)	-
Sodium selenite 10102-18-8 (<0.00011)	Listed

US Federal Regulations

SARA 313

This product contains the following toxic chemical(s) subject to the notification requirements of section 313 of Title III of the Superfund Amendments and Reauthorization Act of 1986. This law requires certain manufacturers to report on annual emissions of specified chemicals and chemical categories. Please note that if you repackage, or otherwise redistribute, this product to industrial customers, a notice similar to this one should be sent to those customers:.

Chemical Name	CAS-No	Weight %	SARA 313 - Threshold Values
Ammonium meta-Vanadate	7803-55-6	<0.01	1.0
Sodium selenite	10102-18-8	<0.00011	1.0

Clean Air Act, Section 112 Hazardous Air Pollutants (HAPs) (see 40 CFR 61)

This product contains the following HAPs:.

Component	CAS-No	Weight %	HAPS data
Sodium selenite 10102-18-8 (<0.00011)	10102-18-8	<0.00011	Present (including any unique chemical substance that contains Selenium as part of its infrastructure)

US State Regulations

Chemical Name	Massachusetts - RTK	New Jersey - RTK	Pennsylvania - RTK	Illinois - RTK	Rhode Island - RTK
Ammonium meta-Vanadate	Listed	-	Listed	-	-
Tin compounds	Listed	-	-	-	-
Sodium selenite	Listed	-	Listed	Listed	Listed

California Proposition 65

This product does not contain any Proposition 65 chemicals.

WHMIS Hazard Class

Non-controlled

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations (CPR) and the MSDS contains all the information required by the CPR.

SECTION 16: Other information

Reason for revision SDS sections updated.

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"The above information was acquired by diligent search and/or investigation and the recommendations are based on prudent application of professional judgment. The information shall not be taken as being all inclusive and is to be used only as a guide. All materials and mixtures may present unknown hazards and should be used with caution. Since the Company cannot control the actual methods, volumes, or conditions of use, the Company shall not be held liable for any damages or losses resulting from the handling or from contact with the product as described herein. THE INFORMATION IN THIS SDS DOES NOT CONSTITUTE A WARRENTY, EXPRESSED OR IMPLIED, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR ANY PARTICULAR PUPOSE"

End of Safety Data Sheet