

Safety Data Sheet

Revision: 01 Date: March 20, 2017

SECTION 1 - PRODUCT AND COMPANY IDENTIFICATION

1. Product Identifiers

Product Name Human Vitronectin Solution

Catalog No 5051

Brand Name Vitronectin CAS No. 83380-82-9

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

Identified Uses Laboratory chemicals, Manufacturer of substances

3. Details of the supplier of the safety data sheet

Company Advanced BioMatrix, Inc.

5930 Sea Lion Place Carlsbad, CA 92010 USA Phone: 1-800-883-8220 1-760-929-0755 outside USA

Fax 1-510-217-3452

4. Emergency telephone number

Emergency Phone No. 1-800-883-8220

SECTION 2 - HAZARDS IDENTIFICATION

1. Classification of the substance or mixture

Not a hazardous substance or mixture.

2. GHS Label elements, including precautionary statements

Not a hazardous substance or mixture.

3. Hazards not otherwise classified (HNOC) or not covered by GHS - None

SECTION 3 - COMPOSITION/INFORMATION ON INGREDIENTS

1. Substances

CAS No. 83380-82-9

No ingredients hazardous according to OSHA criteria.

No components need to be disclosed according to the applicable regulations.

SECTION 4 - FIRST AID MEASURES

1. Eye Contact

Flush eyes with water as a precaution.

2. Skin Contact

Wash off with soap and plenty of water.

3. Inhalation

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

4. Ingestion

Never give anything by mouth to an unconscious person. Rinse mouth with water.

5. 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

6. Indication of any immediate medical attention and special treatment needed

No data available

SECTION 5 – FIREFIGHTING MEASURES

1. Extinguishing media

Use water spray, alcohol-resistant roam, dry chemical or carbon dioxide.

2. Special hazards arising from the substance or mixture

Nature of decomposition of products not known.

3. Advice for firefighters

Wear self-contained breathing apparatus for firefight if necessary.

4. Further Information

No data available

SECTION 6 - ACCIDENTAL RELEASE MEASURES

1. Personal precautions, protective equipment and emergency procedures

Avoid dust formation.

Avoid breath vapors, mist or gas.

For personal protection see section 8.

2. Environmental precautions

Do not let product enter drains.

3. Methods and materials for containment and cleaning up

Sweep up and shovel. Keep in suitable, closed containers for disposal.

4. Reference to other sections

For disposal see section 13.

SECTION 7 - HANDLING AND STORAGE

1. Precautions for safe handling

Provide appropriate exhaust ventilation at place where dust is formed. For precaution see section 2.2

2. Conditions for safe storage, including any incompatibilities

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

Recommended storage temperature -10 to -80°C

Heat sensitive.

Storage class (TRGS 510): Non-combustible, corrosive hazardous materials

3. Specific end use(s)

Apart from the uses mentioned in section 1.2 no other specific uses are stipulated.

SECTION 8 - EXPOSURE CONTROLS/PERSONAL PROTECTION

1. Workplace control parameters

The product does not contain any substances with occupational exposure limit values.

2. Exposure controls

Appropriate engineering controls

General industrial hygiene practice.

Personal protective equipment

Eye/Face protection

Use equipment for eye protection tested and approved under appropriate government standards such as NIOSH (US) or EN 166 (EU).

Skin protection

Handle with gloves. Gloves must be inspected prior to use. Use proper glove removal technique to avoid skin contact with this product. Dispose of the contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Body protection

Choose body protection in relations to its type, to the concentration and amount of dangerous substances, and to the specific work place. The type of protective equipment must be selected according to the concentration and the amount of the dangerous substance at the specific work place.

Respiratory protection

Respiratory protection is not required. For nuisance exposures use type OV/AG (US) or type ABEK (EU EN 14387) respirator cartridges. Use respirators and components tested and approved under appropriate government standards such as NIOSH (US) or CEN (EU).

Control of environmental exposure

Do not let product enter drains.

SECTION 9 - PHYSICAL AND CHEMICAL PROPERTIES

Appearance

Form Liquid Color Clear

Odor No data available Odor threshold No data available pH 6.0 - 8.0 at $25^{\circ \text{C}}$ ($77^{\circ \text{F}}$)

Melting point/freezing point $0.0^{\circ C}$ (32°F) 100.0°C (212.0°F) Initial boiling point and boiling range Not Applicable Flash point Evaporation rate No data available Flammability No data available Upper/lower flammability No data available Vapor pressure No data available Vapor density No data available

Relative density

Water solubility

Partition coefficient: n- octanol/water

Auto-ignition temperature

Decomposition temperature

Viscosity

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 under recommend storage

conditions

Possibility of hazardous reactions No data available

Conditions to avoid

No data available

Incompatible material Strong oxidizing agents
Hazardous decomposition products Hazardous decomposition

products formed under fire conditions. - Nature of

decomposition products not

known.

^{**}In the event of fire: see section 5.**

SECTION 11 - TOXICOLOGICAL INFORMATION

Acute toxicity
Inhalation
Dermal
No data available
No data available
No data available
Skin corrosion/irritation
No data available
Serious eye damage/eye irritation
Respiratory or skin sensitization
No data available
Germ cell mutagenicity
No data available

Carcinogenicity

IARC No components of this product

present at levels greater than or equal to 0.1% is identified as known or anticipate carcinogen by IARC.

NTP No components of this product

present at levels greater than or equal to 0.1% is identified as known or anticipate carcinogen by NTP.

No components of this product

OSHA No components of this product

present at levels greater than or equal to 0.1% is identified as a carcinogen or potential carcinogen by OSHA.

No data available

No data available

No data available

Reproductive toxicity No data available

Specific target organ toxicity

Single exposure
Repeated exposure
Aspiration hazard

Additional information

RTECS No data available

SECTION 12 - ECOLOGICAL INFORMATION

Toxicity
Persistence and degradability
No data available
Bioaccumulative potential
Mobility in soil
No data available
No data available

Results of PBT and vPvB assessment PBT/vPvB assessment not available

as chemical safety assessment not

required/not conducted.

Other adverse effect No data available

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

SECTION13 - DISPOSAL CONSIDERATIONS

Product

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

Contaminated packaging

Dispose of as unused product.

SECTION 14 - TRANSPORT INFORMATION

DOT (US)

IMDG

IATA

Not dangerous goods

Not dangerous goods

Not dangerous goods

SECTION 15 - REGULATORY INFORMATION

SARA 302 Components No chemicals in this material are

subject to the reporting requirements of SARA Title III, Section 302.

SARA 313 Components

This material does not contain any chemical components with known

CAS numbers that exceed the

threshold reporting levels established

by SARA Title III, Section 313.
SARA 311/312 Hazards
No SARA Hazards

Massachusetts Right To Know Components

No components are subject to the Massachusetts Right to Know Act.

Pennsylvania Right To Know Components

Water CAS No. 7732-18-5

New Jersey Right To Know Components

Water CAS No. 7732-18-5
California Prop. 65 Components This product does n

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

harm.

SECTION 16 - OTHER INFORMATION

HMIS Rating	
Health hazard	0
Chronic Health Hazard	0
Flammability	0
Physical Hazard	0
NFPA Rating	
Health hazard	0
Fire Hazard	0
Reactivity Hazard	0

Further information:

This information has been prepared by Advanced BioMatrix, Inc. 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. Advanced BioMatrix, Inc. and its Affiliates shall not be held liable for any damages resulting from handling or from contact with the above product. See www.advancedbiomatrix.com for additional terms and conditions of sale.

Preparation Information:

Advanced BioMatrix, Inc. 1-800-883-8220