

Safety Data Sheet TissueSpec™ Matrix Hydrogel Kit

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TissueSpec™ Matrix in Hydrochloric Acid Solution

1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Product Identifier

Product Name: TissueSpec™ Matrix in Hydrochloric Acid Solution
Product #: MTBV105, MTBN105, MTCT105, MTCO105, MTES105, MTHT105, MTIN105, MTKY105, MTLV105, MTLG105, MTMK105, MTST105

1.2 Product Use

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

1.3 Manufacturer/Supplier Information

MatriTek, Inc.
450 East 29th Street
10th Floor, Suite 1015C
New York, NY 10009
Phone: (518) 649-8922
Email: info@matritek.com

1.4 SDS Preparation

By: MatriTek, Inc.
Date: 09/01/2016

1.5 Emergency Telephone Number

Phone: (518) 649-8922

2. COMPOSITION/INFORMATION ON INGREDIENTS

2.1 Mixtures

Synonyms: none
Product contains biological material of porcine origin. May be harmful.

Component	% (w/w)
Water	98.96
Matrix proteins	1
Hydrochloric acid CAS #: 7647-01-0	0.04

3. HAZARDS IDENTIFICATION

3.1 Classification of the substance or mixture

GHS classification: none

3.2 Label elements

Hazard pictogram. Signal word: Warning



3.3 Other hazards information

Product contains biological material of porcine origin. May be harmful.

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.

If inhaled

If breathed in, move person to fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Wash with soap and water. Consult a physician.

In case of eye contact

Flush eyes with water as a precaution.

If swallowed

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

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in section 11.

4.3 Indication of any immediate medical attention and special treatment needed

No data available

5. FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media

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

5.2 Special hazards arising from the substance or mixture

Nature of decomposition products not known.

5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment, and emergency precautions

Avoid breathing vapors, mist, or gas.

For personal protection, see section 8.

6.2 Environmental precautions

No special environmental precautions required.

6.3 Methods and materials for containment and clean up

Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For disposal see section 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

Avoid inhalation of vapour or mist.
For precautions see section 3.

7.2 Conditions for safe storage, including any incompatibilities

Keep container tightly closed in a dry and well-ventilated place. Containers that are opened must be carefully resealed and kept upright to prevent leakage.

7.3 Specific end use(s)

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

8. EXPOSURE CONTROL/PERSONAL PROTECTION

8.1 Control parameters

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

8.2 Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of the workday.

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 (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Body protection

Impervious clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Respiratory protection 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

No special environmental precautions required.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

- | | | |
|----|----------------|--------|
| a. | Physical state | Liquid |
| b. | Color | White |

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c.	Odor	No data available
d.	Odor threshold	No data available
e.	pH	1.5 – 2.5
f.	Melting point/freezing point	No data available
g.	Boiling point and boiling range	No data available
h.	Flash point	No data available
i.	Evaporation rate	No data available
j.	Flammability (solid, gas)	No data available
k.	Upper/lower flammability or explosive limits	No data available
l.	Vapour pressure	No data available
m.	Vapour density	No data available
n.	Relative density	No data available
o.	Density	No data available
p.	Solubility	No data available
q.	Partition coefficient: n-octanol/water	No data available
r.	Auto-ignition temperature	No data available
s.	Decomposition temperature	No data available
t.	Viscosity	No data available
u.	Explosive properties	No data available
v.	Oxidizing properties	No data available

9.2 Other safety information

No data available.

10. STABILITY AND REACTIVITY

10.1 Reactivity

No data available

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

No data available

10.4 Conditions to avoid

No data available

10.5 Incompatible materials

No data available

10.6 Hazardous decomposition products

Other decomposition products – No data available
In the event of fire, see section 5

11. TOXICOLOGICAL INFORMATION

11.1 Information on toxicological effects

Acute toxicity

No data available

Skin corrosion/irritation

No data available

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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)

The substance or mixture is not classified as a specific target organ toxicant, single exposure.

Specific target organ toxicity (repeated exposure)

The substance or mixture is not classified as a specific target organ toxicant, repeated exposure.

Aspiration hazard

No data available

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

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6 Other adverse effects

No data available

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product

Dispose according to applicable local, state, and federal regulations.

Contaminated packaging

Dispose of as unused product.

14. TRANSPORT INFORMATION

DOT (US)
Not dangerous goods

IATA
Not dangerous goods

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
The following components are subject to reporting levels established by SARA Title III, Section 313:

Hydrochloric acid, CAS #: 7647-01-0, Revision date: 1993-04-24

SARA 311/312 Hazards
No SARA Hazards

Massachusetts Right To Know Components
Hydrochloric acid, CAS #: 7647-01-0, Revision date: 1993-04-24

Pennsylvania Right To Know Components
Water, CAS #: 7732-18-5
Hydrochloric acid, CAS #: 7647-01-0, Revision date: 1993-04-24

New Jersey Right To Know Components
Water, CAS #: 7732-18-5
Hydrochloric acid, CAS #: 7647-01-0, Revision date: 1993-04-24

California Prop. 65 Components
This product does not contain any chemicals known to the State of California to cause cancer, birth defects, or any other reproductive harm.

16. OTHER INFORMATION

HMIS Rating

Health hazard	1
Chronic health hazard	
Flammability	0
Physical hazard	0

NFPA Rating

Health hazard	0
Fire hazard	0
Reactivity hazard	0

Additional Information
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Safety Data Sheet Component A

1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Product Identifier

Product Name: Component A (contains sodium hydroxide), TissueSpec™ Matrix Kit

1.2 Product Use

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

1.3 Manufacturer/Supplier Information

MatriTek, Inc.
450 East 29th Street
10th Floor, Suite 1015C
New York, NY 10009
Phone: (518) 649-8922
Email: info@matritek.com

1.4 MSDS Preparation

By: MatriTek, Inc.
Date: 09/01/2016

1.5 Emergency Telephone Number

Phone: (518) 649-8922

2. COMPOSITION/INFORMATION ON INGREDIENTS

2.1 Mixtures

Synonyms: NaOH
Formula: HNaO
Molecular weight: 40.0 g/mol

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

3. HAZARDS IDENTIFICATION

3.1 Classification of the substance or mixture

Not a hazardous substance or mixture.

3.2 Label elements

Not a hazardous substance or mixture.

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.

If inhaled

If breathed in, move person to fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Wash with soap and water. Consult a physician.

In case of eye contact

Flush eyes with water as a precaution.

If swallowed

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

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in section 11.

4.3 Indication of any immediate medical attention and special treatment needed

No data available

5. FIREFIGHTING MEASURES

5.1 Extinguishing media

Suitable extinguishing media

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

5.2 Special hazards arising from the substance or mixture

No data available

5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

6. ACCIDENTAL RELEASE MEASURES

6.1 Personal precautions, protective equipment, and emergency precautions

Avoid breathing vapors, mist, or gas.

For personal protection, see section 8.

6.2 Environmental precautions

No special environmental precautions required.

6.3 Methods and materials for containment and clean up

Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For disposal see section 13.

7. HANDLING AND STORAGE

7.1 Precautions for safe handling

For precautions see section 3.

7.2 Conditions for safe storage, including any incompatibilities

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

7.3 Specific end use(s)

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

8. EXPOSURE CONTROL/PERSONAL PROTECTION**8.1 Control parameters****Components with workplace control parameters**

Contains no substances with occupational exposure limit values.

8.2 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 (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Body protection

Impervious clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Respiratory protection 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

No special environmental precautions required.

9. PHYSICAL AND CHEMICAL PROPERTIES**9.1 Information on basic physical and chemical properties**

a.	Physical state	Liquid
	Molecular mass	40.00 g/mol
	Color	Colorless
b.	Odor	No data available
c.	Odor threshold	No data available
d.	pH	13
e.	Melting point/freezing point	No data available
f.	Boiling point and boiling range	No data available
g.	Flash point	No data available
h.	Evaporation rate	No data available
i.	Flammability (solid, gas)	No data available
j.	Upper/lower flammability or explosive limits	No data available

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k.	Vapour pressure	No data available
l.	Vapour density	No data available
m.	Density	1.00 g/cm ³
n.	Solubility	No data available
o.	Partition coefficient: n-octanol/water	No data available
p.	Auto-ignition temperature	No data available
q.	Decomposition temperature	No data available
r.	Viscosity	No data available
s.	Explosive properties	No data available
t.	Oxidizing properties	No data available

9.2 Other safety information

No data available

10. STABILITY AND REACTIVITY

10.1 Reactivity

No data available

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

No data available

10.4 Conditions to avoid

No data available

10.5 Incompatible materials

Strong oxidizing agents, strong acids, organic materials.

10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. - Nature of decomposition products not known. Other decomposition products - No data available
In the event of fire, see section 5.

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)

No data available

Aspiration hazard

No data available

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

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6 Other adverse effects

No data available

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product

Dispose according to applicable local, state, and federal regulations.

Contaminated packaging

Dispose of as unused product.

14. TRANSPORT INFORMATION

DOT (US)

Not dangerous goods

IATA

Not dangerous goods

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 (De Minimis) 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 #: 7732-18-5

Sodium hydroxide, CAS #: 1310-73-2, Revision date: 2007-03-01

New Jersey Right To Know Components

Water, CAS #: 7732-18-5

California Prop. 65 Components

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

16. OTHER INFORMATION

HMIS Rating

Health hazard 0

Chronic health hazard

Flammability 0

Physical hazard 0

NFPA Rating

Health hazard 0

Fire hazard 0

Reactivity hazard 0

Additional Information

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Safety Data Sheet Component B

1. PRODUCT AND COMPANY IDENTIFICATION

1.1 Product Identifier

Product Name: Component B (contains phosphate-buffered saline), TissueSpec™ Matrix Kit

1.2 Product Use

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

1.3 Manufacturer/Supplier Information

MatriTek, Inc.
450 East 29th Street
10th Floor, Suite 1015C
New York, NY 10009
Phone: (518) 649-8922
Email: info@matritek.com

1.4 MSDS Preparation

By: MatriTek, Inc.
Date: 09/01/2016

1.5 Emergency Telephone Number

Phone: (518) 649-8922

2. COMPOSITION/INFORMATION ON INGREDIENTS

2.1 Mixtures

Synonyms: PBS
No components need to be disclosed according to the applicable regulations.

3. HAZARDS IDENTIFICATION

3.1 Classification of the substance or mixture

Not a hazardous substance or mixture.

3.2 Label elements

Not a hazardous substance or mixture.

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.

If inhaled

If breathed in, move person to fresh air. If not breathing, give artificial respiration. Consult a physician.

In case of skin contact

Wash with soap and water. Consult a physician.

In case of eye contact

Rinse thoroughly with water for at least 15 minutes and consult a physician.

If swallowed

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

4.2 Most important symptoms and effects, both acute and delayed

The most important known symptoms and effects are described in section 11.

4.3 Indication of any immediate medical attention and special treatment needed

No data available

5. FIREFIGHTING MEASURES**5.1 Extinguishing media****Suitable extinguishing media**

Use extinguishing measures that are appropriate to local circumstances and the surrounding environment.

5.2 Special hazards arising from the substance or mixture

No data available

5.3 Advice for firefighters

Wear self-contained breathing apparatus for firefighting if necessary.

6. ACCIDENTAL RELEASE MEASURES**6.1 Personal precautions, protective equipment, and emergency precautions**

Use personal protective equipment. Avoid breathing vapors, mist, or gas.
Ensure adequate ventilation. For personal protection, see section 8.

6.2 Environmental precautions

Do not let product enter drains.

6.3 Methods and materials for containment and clean up

Soak up with inert absorbent material and dispose of as hazardous waste. Keep in suitable, closed containers for disposal.

6.4 Reference to other sections

For disposal see section 13.

7. HANDLING AND STORAGE**7.1 Precautions for safe handling**

Avoid contact with skin and eyes. Avoid inhalation of vapour or mist.
For precautions see section 3.

7.2 Conditions for safe storage, including any incompatibilities

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

7.3 Specific end use(s)

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

8. EXPOSURE CONTROL/PERSONAL PROTECTION

8.1 Control parameters

Components with workplace control parameters

Contains no substances with occupational exposure limit values.

8.2 Exposure controls

Appropriate engineering controls

Handle in accordance with good industrial hygiene and safety practice. Wash hands before breaks and at the end of the workday.

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 (without touching glove's outer surface) to avoid skin contact with this product. Dispose of contaminated gloves after use in accordance with applicable laws and good laboratory practices. Wash and dry hands.

Body protection

Impervious clothing. The type of protective equipment must be selected according to the concentration and amount of the dangerous substance at the specific workplace.

Respiratory protection

Respiratory protection 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.

9. PHYSICAL AND CHEMICAL PROPERTIES

9.1 Information on basic physical and chemical properties

a.	Physical state	Liquid
	Color	Colorless
	Odor	No data available
b.	Odor threshold	No data available
c.	pH	7.2 – 7.6
d.	Melting point/freezing point	No data available
e.	Boiling point and boiling range	No data available
f.	Flash point	No data available
g.	Evaporation rate	No data available
h.	Flammability (solid, gas)	No data available
i.	Upper/lower flammability or explosive limits	No data available
j.	Vapour pressure	No data available

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Component B

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k.	Vapour density	No data available
l.	Relative density	No data available
m.	Density	No data available
	Solubility	No data available
n.	Partition coefficient: n-octanol/water	No data available
o.	Auto-ignition temperature	No data available
p.	Decomposition temperature	No data available
q.	Viscosity	No data available
r.	Explosive properties	No data available
s.	Oxidizing properties	No data available

9.2 Other safety information

No data available

10. STABILITY AND REACTIVITY

10.1 Reactivity

No data available

10.2 Chemical stability

Stable under recommended storage conditions.

10.3 Possibility of hazardous reactions

No data available

10.4 Conditions to avoid

No data available

10.5 Incompatible materials

Strong oxidizing agents, strong acids.

10.6 Hazardous decomposition products

Hazardous decomposition products formed under fire conditions. – Sodium/sodium oxides, Hydrogen chloride gas, Thermal decomposition may produce toxic fumes of phosphorus oxides and/or phosphine. Other decomposition products - No data available. In the event of fire, see section 5.

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)

No data available

Aspiration hazard

No data available

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

PBT/vPvB assessment not available as chemical safety assessment not required/not conducted

12.6 Other adverse effects

No data available

13. DISPOSAL CONSIDERATIONS

13.1 Waste treatment methods

Product

Dispose according to applicable local, state, and federal regulations.

Contaminated packaging

Dispose of as unused product.

14. TRANSPORT INFORMATION

DOT (US)

Not dangerous goods

IATA

Not dangerous goods

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 (De Minimis) 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 #: 7732-18-5

Sodium chloride, CAS #: 7647-14-5

New Jersey Right To Know Components

Water, CAS #: 7732-18-5

Sodium chloride, CAS #: 7647-14-5

California Prop. 65 Components

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

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

Additional Information

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