



MATERIAL SAFETY DATA SHEET

ProteoHook™ 2DE Sample Preparation Kit

1. Chemical Product and Company Identification

ProteoHook 2DE Sample Preparation kit

2. Composition and Information on Ingredients

<i>Product Name</i>	<i>Unit</i>
ProteoHook™	1 mg
Wash Buffer I	4 ml
Wash Buffer II	4 ml
Wash Buffer III	4 ml
Elution Buffer	4 ml
Reconstitution Solution	1 ml
ProteoHook™ resin	2 ml
ProteoHook™ column	10
ProteoHook™ plug	10

MSDS for each component of the kit is given below.



ProteoHook™

1. Chemical Product and Company Identification

ProteoHook

2. Composition and Information on Ingredients

Chemical characterization: Octapeptide

3. Hazards Identification

Potential Acute Health Effects:

Inhalation:

Irritation of respiratory system may be harmful, irritation of mucous membranes.

Ingestion:

Harmful if swallowed.

Skin Contact:

May be irritant, may be harmful.

Eye Contact:

May be irritant

Chronic Exposure:

No information found.

Aggravation of Pre-existing conditions:

No information found.

4. First Aid Measures

Eye Contact:

Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keep eyelids open. Cold water may be used. Get medical attention if irritation occurs.

Skin Contact:

Wash with soap and water. Cover the irritated skin with an emollient. Get medical attention if irritation develops. Cold water may be used.

Inhalation:

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Serious Inhalation: Not available.

Ingestion:

Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.

Serious Ingestion: Not available.

5. Fire and Explosion Data

Fire:

Not expected to be a fire hazard.

6. Accidental Release Measures

Taken up by mechanical means (avoid dust formation) and place into sealed containers for adequate disposal. DO NOT allow to enter in the sewage or ground waters. Wash contaminated area well with soap and water.



7. Handling and Storage

Storage: Store at -80°C, Keep container tightly closed. It is hygroscopic and moisture sensitive.

8. Exposure Controls/Personal Protection

Airborne Exposure Limits:

None established.

Personal Protection:

Be sure to use safety glasses, lab coat, glove, dust respirator and an approved/certified respirator or equivalent.

Personal Protection in Case of a Large Spill:

Splash goggles, full suit, dust respirator, boots, gloves. A self contained breathing apparatus should be used to avoid inhalation of the product.

9. Physical and Chemical Properties

Physical state and appearance: White powder

Odor: Not available.

Molecular Weight: 1280

Color: white.

Specific Gravity: Not available.

Solubility: Soluble in water.

10. Stability and Reactivity Data

Stability: The product is stable in solid state.

Instability Temperature: Not available.

Conditions of Instability: Excess heat, moisture

Incompatibility with various substances: Reactive with oxidizing agents, acids, alkalis.

Special Remarks on Reactivity:

Hygroscopic; keep container tightly closed. Moisture sensitive.

Polymerization: Will not occur.

11. Toxicological Information

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

12. Ecological Information

Do not allow material to be released to the environment without proper governmental permits.

13. Disposal Considerations

Waste must be disposed of in accordance with federal, state and local environmental control regulations.

14. Transport Information

DOT Classification: Not a DOT controlled material (United States).

Identification: Not applicable.

Special Provisions for Transport: Not applicable.



15. Other Regulatory Information

May cause harm to the unborn child.

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Wear suitable protective clothing, gloves and eye/face protection.

Protective Equipment: gloves, lab coat, dust respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate.

16. Other Information

The above information is believed to be correct but is not all inclusive and shall be used only as a guide. Proteopure should not be held liable for any damage resulting from handling or from contact with the above product.



Wash Buffer I, II, III

1. Chemical Product and Company Identification

Wash Buffers I, II and III

2. Composition and Information on Ingredients

Chemical characterization:

Description: Mixture of the substances listed below with non-hazardous additions.

Listing of dangerous and non-hazardous components:

CAS: 7732-18-5	Water	50-100%
CAS: 57-13-6	Urea	5-10%
CAS: 75621-03-3	Chaps	1-5%
CAS: 7365-45-9	Hepes	1-5%

3. Hazards Identification

Potential Acute Health Effects:

Inhalation:

Irritation of respiratory system may be harmful, irritation of mucous membranes.

Ingestion:

Harmful if swallowed.

Skin Contact:

May be irritant, may be harmful.

Eye Contact:

May be irritant

Chronic Exposure:

No information found.

Aggravation of Pre-existing conditions:

No information found.

4. First Aid Measures

Eye Contact:

Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keep eyelids open. Cold water may be used. Get medical attention if irritation occurs.

Skin Contact:

Wash with soap and water. Cover the irritated skin with an emollient. Get medical attention if irritation develops. Cold water may be used.

Inhalation:

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Serious Inhalation: Not available.

Ingestion:

Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.

Serious Ingestion: Not available.

5. Fire and Explosion Data



Fire:

Not expected to be a fire hazard.

6. Accidental Release Measures

Taken up by mechanical means (avoid dust formation) and place into sealed containers for adequate disposal. DO NOT allow to enter in the sewage or ground waters. Wash contaminated area well with soap and water.

7. Handling and Storage

Storage: Store at -80°C

8. Exposure Controls/Personal Protection

Airborne Exposure Limits:

None established.

Personal Protection:

Be sure to use safety glasses, lab coat, glove, dust respirator and an approved/certified respirator or equivalent.

Personal Protection in Case of a Large Spill:

Splash goggles, full suit, dust respirator, boots, gloves. A self contained breathing apparatus should be used to avoid inhalation of the product.

9. Physical and Chemical Properties

Physical state and appearance: Solution

Odor: Not available.

Color: Colorless

Specific Gravity: Not available.

Evaporation Rate: Not available

Viscosity: Not available.

10. Stability and Reactivity Data

Stability: The product is stable in -80°C.

Polymerization: Will not occur.

11. Toxicological Information

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

12. Ecological Information

Ecotoxicity: Not available.

Products of Biodegradation:

Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation: The product itself and its products of degradation are not toxic.

Special Remarks on the Products of Biodegradation: Not available.

13. Disposal Considerations

Waste Disposal:



Waste must be disposed of in accordance with federal, state and local environmental Control regulations.

14. Transport Information

DOT Classification: Not a DOT controlled material (United States).

Identification: Not applicable.

Special Provisions for Transport: Not applicable.

15. Other Regulatory Information

In case of contact with eyes, rinse immediately with plenty of water and seek medial advice.

Wear suitable protective clothing, gloves and eye/face protection.

Protective Equipment: gloves, lab coat, dust respirator. Be sure to use and approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate.

16. Other Information

The above information is believed to be correct but is not all inclusive and shall be used only as a guide. Proteopure should not be held liable for any damage resulting from handling or from contact with the above product.



Elution Buffer

1. Chemical Product and Company Identification

Elution Buffer

2. Composition and Information on Ingredients

Chemical characterization:

Description: Mixture of the substances listed below with non-hazardous additions.

Listing of dangerous and non-hazardous components:

CAS: 7732-18-5	Water	50-100%
CAS: 57-13-6	Urea	5-10%
CAS:75621-03-3	Chaps	1-5%
CAS: 68-04-2	Sodium Citrate	1-5%
CAS:77-92-9	Citric acid	1-5%

3. Hazards Identification

Potential Acute Health Effects:

Inhalation:

Irritation of respiratory system may be harmful, irritation of mucous membranes.

Ingestion:

Harmful if swallowed.

Skin Contact:

May be irritant, may be harmful.

Eye Contact:

May be irritant

Chronic Exposure:

No information found.

Aggravation of Pre-existing conditions:

No information found.

4. First Aid Measures

Eye Contact:

Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keep eyelids open. Cold water may be used. Get medical attention if irritation occurs.

Skin Contact:

Wash with soap and water. Cover the irritated skin with an emollient. Get medical attention if irritation develops. Cold water may be used.

Inhalation:

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Serious Inhalation: Not available.

Ingestion:

Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.

Serious Ingestion: Not available.

5. Fire and Explosion Data



Fire:

Not expected to be a fire hazard.

6. Accidental Release Measures

Taken up by mechanical means (avoid dust formation) and place into sealed containers for adequate disposal. DO NOT allow to enter in the sewage or ground waters. Wash contaminated area well with soap and water.

7. Handling and Storage

Storage: Store at -80°C

8. Exposure Controls/Personal Protection

Airborne Exposure Limits:

None established.

Personal Protection:

Be sure to use safety glasses, lab coat, glove, dust respirator and an approved/certified respirator or equivalent.

Personal Protection in Case of a Large Spill:

Splash goggles, full suit, dust respirator, boots, gloves. A self contained breathing apparatus should be used to avoid inhalation of the product.

9. Physical and Chemical Properties

Physical state and appearance: Solution

Odor: Not available.

Color: Colorless

Specific Gravity: Not available.

Evaporation Rate: Not available

Viscosity: Not available.

10. Stability and Reactivity Data

Stability: The product is stable in -80°C.

Polymerization: Will not occur.

11. Toxicological Information

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

12. Ecological Information

Ecotoxicity: Not available.

Products of Biodegradation:

Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation: The product itself and its products of degradation are not toxic.

Special Remarks on the Products of Biodegradation: Not available.

13. Disposal Considerations

Waste Disposal:



Waste must be disposed of in accordance with federal, state and local environmental Control regulations.

14. Transport Information

DOT Classification: Not a DOT controlled material (United States).

Identification: Not applicable.

Special Provisions for Transport: Not applicable.

15. Other Regulatory Information

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Wear suitable protective clothing, gloves and eye/face protection.

Protective Equipment: gloves, lab coat, dust respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate.

16. Other Information

The above information is believed to be correct but is not all inclusive and shall be used only as a guide. Proteopure should not be held liable for any damage resulting from handling or from contact with the above product.



ProteoHook™ Reconstitution Solution

1. Chemical Product and Company Identification

Reconstitution solution

2. Composition and Information on Ingredients

Chemical characterization:

Listing of dangerous and non-hazardous components:

CAS: 7732-18-5	Water	50-100%
CAS: 76-05-1	Trifluoroacetic acid	0.1-1%
CAS:75-05-8	acetonitrile	50-100%

3. Hazards Identification

Potential Acute Health Effects:

Inhalation:

Irritation of respiratory system is harmful, irritation of mucous membranes.

Ingestion:

Harmful if swallowed.

Skin Contact:

Irritant, Harmful.

Eye Contact:

Irritant

Chronic Exposure:

No information found.

Aggravation of Pre-existing conditions:

No information found.

4. First Aid Measures

Eye Contact:

Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keep eyelids open. Cold water may be used. Get medical attention if irritation occurs.

Skin Contact:

Wash with soap and water. Cover the irritated skin with an emollient. Get medical attention if irritation develops. Cold water may be used.

Inhalation:

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Serious Inhalation: Not available.

Ingestion:

Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.

Serious Ingestion: Not available.

5. Fire and Explosion Data

Fire:

Not expected to be a fire hazard.



6. Accidental Release Measures

Taken up by mechanical means (avoid dust formation) and place into sealed containers for adequate disposal. DO NOT allow to enter in the sewage or ground waters. Wash contaminated area well with soap and water.

7. Handling and Storage

Storage: Store at room temperature

8. Exposure Controls/Personal Protection

Airborne Exposure Limits:

None established.

Personal Protection:

Be sure to use safety glasses, lab coat, glove, dust respirator and an approved/certified respirator or equivalent.

Personal Protection in Case of a Large Spill:

Splash goggles, full suit, dust respirator, boots, gloves. A self contained breathing apparatus should be used to avoid inhalation of the product.

9. Physical and Chemical Properties

Physical state and appearance: Solution

Odor: Not available.

Color: Colorless

Specific Gravity: Not available.

Evaporation Rate: Not available

Viscosity: Not available.

10. Stability and Reactivity Data

Stability: The product is stable at room temperature.

Polymerization: Will not occur.

11. Toxicological Information

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

12. Ecological Information

Ecotoxicity: Not available.

Products of Biodegradation:

Possibly hazardous short term degradation products are not likely. However, long term degradation products may arise.

Toxicity of the Products of Biodegradation: The product itself and its products of degradation are not toxic.

Special Remarks on the Products of Biodegradation: Not available.

13. Disposal Considerations

Waste Disposal:

Waste must be disposed of in accordance with federal, state and local environmental Control regulations.



14. Transport Information

DOT Classification: Not a DOT controlled material (United States).

Identification: Not applicable.

Special Provisions for Transport: Not applicable.

15. Other Regulatory Information

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Wear suitable protective clothing, gloves and eye/face protection.

Protective Equipment: gloves, lab coat, dust respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate.

16. Other Information

The above information is believed to be correct but is not all inclusive and shall be used only as a guide. Proteopure should not be held liable for any damage resulting from handling or from contact with the above product.



ProteoHook™ Resin

1. Chemical Product and Company Identification

ProteoHook Resin

2. Composition and Information on Ingredients

Substance Name	CAS #	
ProteoHook Resin	None	
Ingredient Name	CAS #	Percentage
Ethyl Alcohol, Non-denatured	64-17-5	30

3. Hazards Identification

Flammable

Potential Acute Health Effects:

Inhalation:

Irritation of respiratory system may be harmful, irritation of mucous membranes.

Ingestion:

Harmful if swallowed.

Skin Contact:

May be irritant, may be harmful.

Eye Contact:

May be irritant

Chronic Exposure:

No information found.

Aggravation of Pre-existing conditions:

No information found.

4. First Aid Measures

Eye Contact:

Check for and remove any contact lenses. Immediately flush eyes with running water for at least 15 minutes, keep eyelids open. Cold water may be used. Get medical attention if irritation occurs.

Skin Contact:

Wash with soap and water. Cover the irritated skin with an emollient. Get medical attention if irritation develops.

Cold water may be used.

Inhalation:

If inhaled, remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Get medical attention.

Serious Inhalation: Not available.

Ingestion:

Do NOT induce vomiting unless directed to do so by medical personnel. Never give anything by mouth to an unconscious person. If large quantities of this material are swallowed, call a physician immediately. Loosen tight clothing such as a collar, tie, belt or waistband.

Serious Ingestion: Not available.

5. Fire and Explosion Data

Fire:

Flammable Hazards

Flash Point:

32 °C



Extinguishing media:

Water spray, carbon dioxide, dry chemical powder or appropriate foam.

6. Accidental Release Measures

Evacuate area. Cover with dry-lime, sand, or soda ash. Place in covered containers using non-sparking tools and transport outdoors. Ventilate area and wash spill site after material pickup is complete.

7. Handling and Storage

Storage: Store at 2-8 °C, Keep container tightly closed. Keep away from heat and open flame.

8. Exposure Controls/Personal Protection

Airborne Exposure Limits:

None established.

Personal Protection:

Be sure to use safety glasses, lab coat, glove, dust respirator and an approved/certified respirator or equivalent.

Personal Protection in Case of a Large Spill:

Splash goggles, full suit, dust respirator, boots, gloves.

9. Physical and Chemical Properties

Physical state and appearance: Faintly turbid liquid

Odor: Not available.

Color: White.

Flash Point: 32 °C

Specific Gravity: Not available.

10. Stability and Reactivity Data

Stability: Stable

Conditions of Instability: Moisture

Incompatibility with various substances: Reactive with oxidizing agents, acids, alkalis.

Special Remarks on Reactivity:

Avoid acids, acid chlorides, acid anhydrides, alkali metals, ammonia, oxidizing agents, peroxides.

11. Toxicological Information

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

12. Ecological Information

Do not allow material to be released to the environment without proper governmental permits.

13. Disposal Considerations

Waste must be disposed of in accordance with federal, state and local environmental control regulations.

14. Transport Information



DOT Classification: Ethyl alcohol solutions (United States).
Identification: Flammable liquid.

15. Other Regulatory Information

In case of contact with eyes, rinse immediately with plenty of water and seek medical advice.

Wear suitable protective clothing, gloves and eye/face protection.

Protective Equipment: gloves, lab coat, dust respirator. Be sure to use an approved/certified respirator or equivalent. Wear appropriate respirator when ventilation is inadequate.

16. Other Information

The above information is believed to be correct but is not all inclusive and shall be used only as a guide. Proteopure should not be held liable for any damage resulting from handling or from contact with the above product.